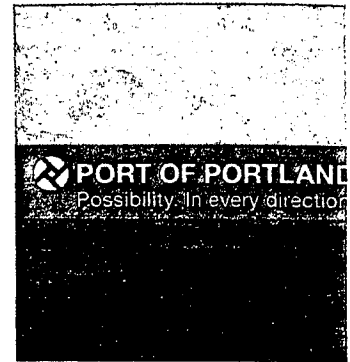


**KINDER MORGAN BULK TERMINALS, INC.
PORT OF PORTLAND TERMINAL 4**

EXHIBITS TO 104(E) SUBMISSION



October 4, 2010

Kinder Morgan
Attn: Marco Ullmer
West Coast Region General Manager
101 E. Eighth Street, Suite 260
Vancouver, WA 98660

Re: Terminal 4 Lease Agreement # 1987-109
Executed Amendment No. 8

Dear Marco:

Enclosed for your records is the original, executed Amendment No. 8 for the terminal lease agreement referenced above between Kinder Morgan Bulk Terminals, Inc. ("KM") and the Port of Portland ("Port").

Amendment No. 8 incorporates the new space to be used by Kinder Morgan in Warehouse No. 4 at Terminal 4, as described in Section 1.6, and incorporates that warehouse space along with the Bulk Storage Facility, rails, associated buildings, utilities, paved yard area, and the New Rail Improvements described in Section 5, all as the Premises of the lease and further identified in the Exhibits A2 and A3 attached to the Amendment.

We have also memorialized the completion of the Initial Audit and Environmental Baseline, as well as updated the notices addresses for Kinder Morgan and the Port given the Port's recent move to the new headquarters building.

Thank you for your assistance with this matter. If you have any questions, please contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "Debra Crawford".

Debra Crawford
Property Manager
Phone: 503-415-6536
Fax: 503-548-5526
Email: debra.crawford@portofportland.com

Enclosure

cc: Jeff Krug, Port
Bruce Craven, Kinder Morgan

**AMENDMENT NO. 8
TO
TERMINAL LEASE
BETWEEN
KINDER MORGAN OPERATING L.P. "C"
AND
THE PORT OF PORTLAND**

This Amendment No. 8 ("Amendment") is executed by the Port of Portland, a port district organized under the laws of the State of Oregon ("Port"), Kinder Morgan Operating L.P. "C", a Delaware limited partnership ("Lessee"), and Kinder Morgan Bulk Terminals, Inc., a Louisiana corporation ("KMBT"), effective as of September 16, 2010 (except as expressly provided in Section 1 of this Amendment below).

RECITALS

A. The Port is "Lessor" under a certain Terminal Use and Development Lease (Port Agreement No. 87-109, at the Port's Marine Terminal 4) with Lessee dated October 30, 1987, as amended by Amendment No. 1 thereto dated November 24, 1993, as further amended by Amendment No. 2 thereto dated July 1, 1999, as further amended by Amendment No. 3 thereto dated July 1, 2003, and as further amended by Amendment No. 4 thereto dated December 31, 2003, as further amended by Amendment No. 5 thereto dated March 31, 2004, as further amended by Amendment No. 6 thereto dated June 30, 2004, and as further amended by Amendment No. 7 thereto dated July 1, 2004 (collectively and as amended from time to time, the "Lease" or "Terminal Lease").

B. Effective as of July 1, 2004, KMBT assigned its rights and obligations under the Lease to Lessee, as referenced in Amendment No. 7 to the Lease.

C. The parties wish to further modify the Lease effective as of and following the date first written above to expand the Premises under the Lease, and to memorialize the completion of the Initial Audit and certain improvements to the Premises.

NOW, THEREFORE, in consideration of the covenants and promises contained in this Amendment, the parties agree, effective as of and following the date first written above, as follows:

1. PREMISES

As of the effective date of this Amendment, the "Premises" as defined in the Lease, shall be the real property consisting of approximately 7.320 acres of land as currently depicted on Drawing #T4 2004-4 Sheet 1/1 identified as the replacement **Exhibit A2** under Amendment No. 7, together with approximately 0.350 acres of land as shown on Drawing #T4 2004-4 Sheet 1A/1 identified as **Exhibit A3** incorporated herein by this reference, together with the Bulk Storage Facility, rails, associated buildings, utilities, paved yard area, the New Rail Improvement described in Section 5 of the Lease, and the Warehouse No. 4 Space described in Section 1.6 of the Lease, all as shown on the attached **Exhibits A2 and A3**, attached hereto and incorporated as part of the Lease by this reference. All references in the Lease to the Premises shall be deemed to reference the Premises as described in this Section 1.

1.1 Correction

Amendment No. 7, in the paragraph entitled "REVISED ARTICLE 1 – PREMISES", inadvertently provided that Section 1.1 of the Lease was deleted in its entirety. The parties hereby acknowledge that the intent of such paragraph was to revise the "Premises" as provided in the text of such paragraph and not to delete Section 1.1 in its entirety.

2. PREFERENTIAL USE

Section 1.2 of the Lease is hereby deleted in its entirety and replaced with the following:

1.2 Preferential Use

Lessee shall have the preferential use of the wharves, rail tracks and aprons at Berths 410 and 411, Terminal 4, as shown in **Exhibit A3**, for the export of commodities under the terms and conditions of this Terminal Lease.

3. LEASE OF WAREHOUSE NO. 4 SPACE

The following new section 1.8 is hereby added to the Lease as follows:

1.8 Lease of Warehouse No. 4 Space

In addition to the Premises currently leased by the Port to Lessee under this Lease, the Port hereby leases to the Lessee and Lessee leases from the Port an area consisting of approximately 6,000 square feet of warehouse space within the Port's Warehouse No. 4 ("Warehouse No. 4 Lessee Area"), together with approximately 9,235 square feet of adjacent paved yard area ("Warehouse No. 4 Yard"), all as described and shown on attached **Exhibit A3**, incorporated as part of the Lease by this reference (collectively, the Warehouse No. 4 Lessee Area and the Warehouse No. 4 Yard are the "Warehouse No. 4 Space"), and only for the Allowed Uses set forth below. Subject to the terms and conditions contained in Amendment No. 8 of the Lease, all references in the Lease to the Premises shall be deemed to include the Warehouse No. 4 Space, and the Warehouse No. 4 Space shall be subject to all the terms and conditions contained in the Lease.

1.8.1 Delivery of Warehouse No. 4 Space

Lessee shall have the right to possession of the Warehouse No. 4 Space as of September 20, 2010.

1.8.2 Condition of Warehouse No. 4 Space

The Port makes no warranties or representations regarding the condition of the Warehouse No. 4 Space, including without limitation the environmental condition of the Warehouse No. 4 Space or its suitability for Lessee's intended use. Lessee has inspected and accepts the Warehouse No. 4 Space in "AS IS" condition upon taking possession. Notwithstanding the foregoing, the Initial Audit shall serve as the baseline for determination of all potential future environmental liability with respect to the Warehouse No. 4 Space as provided for in Section 10.3 of the Lease.

1.8.3 Allowed Use of Warehouse No. 4 Space

Lessee shall use the Warehouse No. 4 Lessee Area solely to store motor vehicles, cargo handling equipment and parts, and for no other purpose ("Warehouse Allowed Use"). Lessee's access to the Warehouse No. 4 Lessee Area shall be via the Warehouse No. 4 Yard and

conducted primarily during daylight hours with limited access at night in the event of emergency maintenance or repairs to support Lessee ship and/or rail operations. Lessee shall use the Warehouse No. 4 Yard solely for ingress and egress to and from the Warehouse No. 4 Lessee Area and for no other purpose ("Allowed Yard Use"). No outside storage of vehicles or other equipment shall be allowed. No hazardous substances shall be allowed within the Warehouse No. 4 Space, other than petroleum-derived products fully contained within motor vehicles and motorized equipment. No fueling, painting, or repairs (with the exception of minor equipment repairs) shall be allowed within the Warehouse No. 4 Space. Lessee shall provide, at Lessee expense, security for Lessee's equipment stored in Warehouse No. 4 Lessee Area. The Port shall have no responsibility to provide any security for the Warehouse No. 4 Space. Lessee shall not access any portion of Warehouse No. 4 outside the Warehouse No. 4 Space, and shall not use, damage or disrupt the Port use of Port equipment and other personal property. All references to Lessee's use of the Premises or the Permitted Uses shall, with respect to the Warehouse No. 4 Space, mean the Allowed Warehouse Use and Allowed Yard Use as described in this Section 1.6.1. Lessee acknowledges that Lessee shall be liable for, and shall comply with all terms and conditions of the Lease.

1.8.4 Warehouse No. 4 Tenant Improvements

On behalf of Lessee, Port will make tenant improvements and upgrades (collectively "Tenant Improvements") to the Warehouse No. 4 Lessee Area to provide for separate lighting for the Warehouse No. 4 Lessee Area, add a barrier to separate the Warehouse No. 4 Lessee Area from the remainder of Warehouse No. 4, and add a pedestrian access door. Lessee shall pay to the Port, as additional rent for the Tenant Improvements, the amount of Four Thousand Dollars (\$4,000.00), payable in twelve monthly installments ("TI Payment"), commencing on the Effective date of Amendment No. 8 and continuing on the first (1st) day of each consecutive month thereafter until paid in full. The TI Payment shall be payable in the amount of \$333.33 for the first eleven (11) installments, followed by a final installment in the amount of \$333.97. Upon the Port's receipt of full payment of the \$4,000.00 TI Payment, the monthly installments pursuant to this Section shall cease. The TI Payment shall be payable to the Port in advance without setoff, deduction or notice of any kind. Lessee shall not be charged for electricity with respect to the Warehouse No. 4 Lessee Area.

1.8.5 Maintenance of Warehouse No. 4 Space

The Port shall maintain the building shell for the Warehouse No. 4 Lessee Area, provided that Lessee shall be responsible for any damage to any portion of Warehouse No. 4 by Lessee or its Associates.

4. WAREHOUSE NO. 4 MONTHLY RENT

A new Section 3.10 is hereby added to the Lease as follows:

3.10 Warehouse No. 4 Monthly Rent

Beginning on the Effective Date of Amendment No. 8 and continuing on the first (1st) day of every month thereafter during the Lease Term, Lessee shall pay to the Port, in addition to the Annual Rent and Monthly Rent referenced in Section 3.2, monthly rent for the Warehouse No. 4 Space in the amount of One Thousand Five Hundred Dollars (\$1,500.00) ("Warehouse No. 4 Monthly Rent"). Warehouse No. 4 Monthly Rent shall be payable monthly in advance,

without setoff, deduction or notice of any kind. Warehouse No. 4 Monthly Rent shall automatically increase by one and one-half percent (1.5%) on July 1, 2012 and each July 1 thereafter during the term of the Lease or Lease Extension Term. Section 3.9 (Rent Abatement) shall not apply to the Warehouse No. 4 Monthly Rent.

5. RAIL PROGRESSOR

The parties acknowledge the completion of the rail progressor referenced in Section 4.16 of the Lease and acceptance of the As-Built survey thereof, effective as of September 2006, with final modifications completed as of May, 2009.

6. BULK OUTLOADER IMPROVEMENTS

By letter to Lessee dated April 20, 2009, the Port acknowledged the completion and acceptance of a copy of the feasibility analysis for bulk outdoor improvements as referenced in Section 4.17 of the Lease.

7. NEW RAIL IMPROVEMENT AND DOCK MODIFICATION

The parties acknowledge the completion of the Dock Modification as of June 2005, and completion of the New Rail Improvement as of April 2007, satisfying the requirements pursuant to Section 5.5 of the Lease.

8. INITIAL AUDIT AND ENVIRONMENTAL BASELINE

The following paragraph 10.3.1.1 shall be added to the Lease as follows:

10.3.1.1 Pursuant to Section 10.3.1, an environmental audit of the Premises entitled "Final Report – Baseline Audit Kinder Morgan Bulk Terminal Leasehold" was performed by URS Corporation, dated December 29, 2009 ("URS Audit"), as supplemented by the report entitled "Final – Storm Water Data Summary Report" performed by Ash Creek Associates and dated March 23, 2009 ("Supplemental Report"), and further supplemented by a supplemental environmental audit as documented in that memorandum entitled "Baseline Environmental Inspection and Records Review – Kinder Morgan Bulk Terminals Leasehold Expansion, 11040 N Lombard Street; Marine Terminal 4, Pier 4, Portland, Oregon" prepared by Hart Crowser and dated July 27, 2010 ("Supplemental Memorandum"). The parties acknowledge and agree that the URS Audit, as supplemented by the Supplemental Report and the Supplemental Memorandum, shall constitute the Initial Audit of the Premises to be used as the Environmental Baseline pursuant to Section 10.3.1, and is hereby incorporated in the Lease for all purposes by this reference. Lessee acknowledges receipt of a copy of the Initial Audit.

9. NOTICES

Section 9.12 of the Lease, as revised by Amendment No. 3, is hereby deleted in its entirety and replaced with the following:

9.12 Notices

All notices required or desired to be given under this Lease shall be in writing and may be delivered by personal delivery (including by reputable overnight courier) or by deposit in the United States mail, postage prepaid, as certified mail, return receipt requested, and addressed as follows:

To the Port at: The Port of Portland
7200 NE Airport Way
Portland, OR 97218
Attention: Property Manager, Property & Development Services

with a copy to: The Port of Portland
7200 NE Airport Way
Portland, OR 97218
Attention: Legal Department

and to Lessee at: Kinder Morgan Bulk Terminals, Inc.
101 E. 8th Street, Suite 260
Vancouver, WA 98660
Attn: Marco Ullmer, General Manager, West Coast Region

With a copy to: Kinder Morgan Bulk Terminals, Inc.
11040 N. Lombard, Terminal 4, Pier 4
Portland, OR 97203
Attn: Bruce Craven, Terminal Manager

Any notice delivered by personal delivery shall be deemed received by the addressee upon actual delivery; any notice delivered by mail as set forth in this Lease shall be deemed received by the addressee on the third business day after deposit. The addresses to which notices are to be delivered may be changed by giving notice of such change in accordance with this notice provision. In order for notice to be deemed effectively given to the Port by mail or hand delivery, notice must be sent to both Port addresses given above.

10. WARRANTY OF AUTHORITY

The individuals executing this Amendment No. 8 on behalf of Lessee and KMBT each represent and warrant that they are authorized by Lessee and KMBT, respectively, to do so.

11. DEFINED TERMS

All capitalized terms used but not otherwise defined in this Amendment shall have the same meaning as in the Lease or any of the preceding amendments.

12. ENTIRE AGREEMENT

Except to the extent expressly modified by this Amendment No. 8, all of the terms and conditions of the Lease, as previously amended, shall remain in full force and effect. Nothing contained herein is intended to replace or supersede any prior document referenced in the Lease unless it is expressly stated that it is intended to replace or supersede such document.

13. **EFFECTIVE DATE**

The provisions of this Amendment are effective only with respect to events or matters that occur or arise on or after the effective date of this Amendment.

KINDER MORGAN OPERATING L.P. "C"

By: Kinder Morgan G.P., Inc., Its General Partner

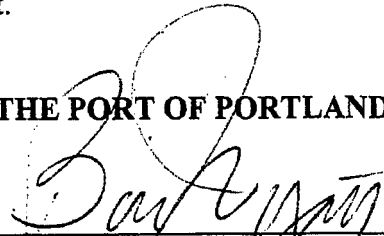
**By: Kinder Morgan Management, LLC, Its
Delegate**

By: _____

Name: Marco Allner

Title: General Manager West Coast Region

THE PORT OF PORTLAND


Bill Wyatt, Executive Director

**APPROVED AS TO LEGAL SUFFICIENCY
FOR THE PORT OF PORTLAND**

By: Jeani Kuehn
Counsel for Port of Portland

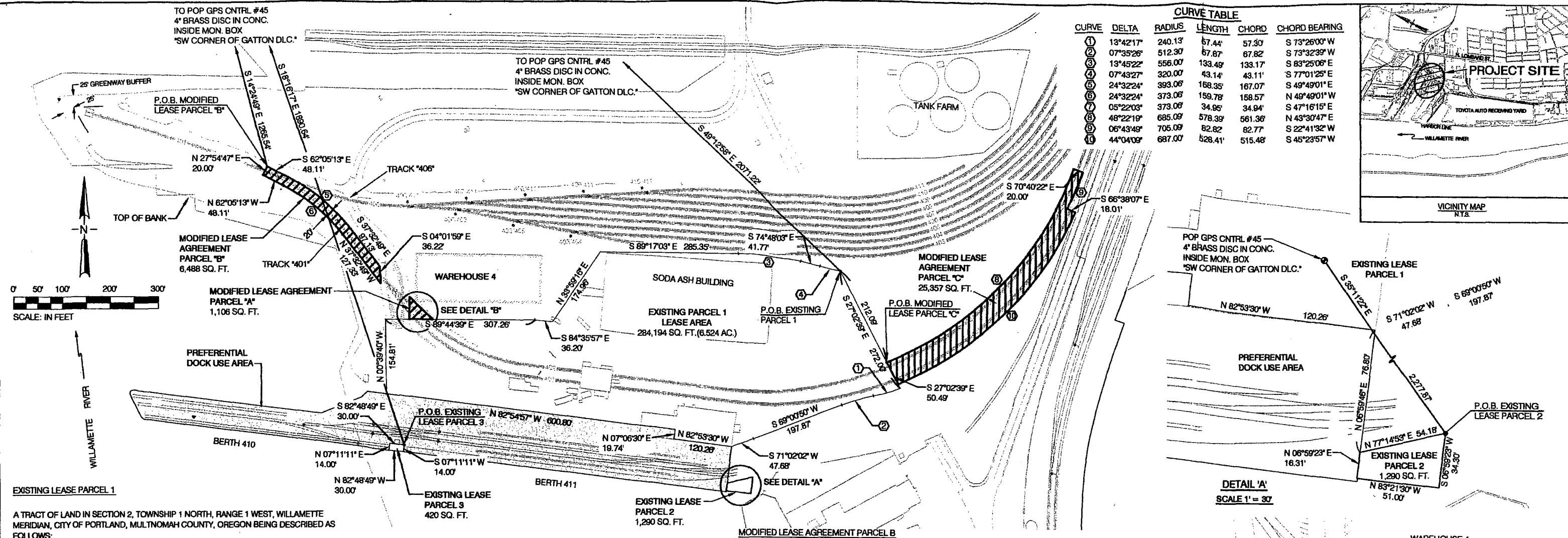
READ, ACKNOWLEDGED AND AGREED:

KINDER MORGAN BULK TERMINALS, INC.

By: _____

Marco Allner General Manager West Coast Region
Please print name and title

EXHIBITS A2 & A3
PREMISES AND PREFERENTIAL USE AREA



EXISTING LEASE PARCEL 1

A TRACT OF LAND IN SECTION 2, TOWNSHIP 1 NORTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF PORTLAND, MULTNOMAH COUNTY, OREGON BEING DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHICH BEARS SOUTH 46°12'58" EAST, 2071.22 FEET FROM A 4-INCH DIAMETER BRASS DISC SET IN CONCRETE INSIDE A MONUMENT BOX STAMPED "SW CORNER OF GATTON DLC."; THENCE SOUTH 27°02'39" EAST, 272.00 FEET; THENCE ALONG THE ARC OF A NON-TANGENT 240.13 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 13°42'17", A DISTANCE OF 57.44 FEET TO A POINT OF REVERSE CURVE THAT BEARS SOUTH 73°26'00" WEST, 57.30 FEET FROM THE LAST DESCRIBED POINT; THENCE ALONG THE ARC OF A 512.30 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 07°35'26" A DISTANCE OF 67.87 FEET TO A POINT THAT BEARS SOUTH 73°32'39" WEST, 67.82 FEET FROM THE LAST DESCRIBED POINT; THENCE SOUTH 69°00'50" WEST, 197.87 FEET; THENCE SOUTH 71°02'02" WEST, 47.68 FEET; THENCE NORTH 82°53'30" WEST, 120.26 FEET; THENCE NORTH 07°06'30" EAST, 19.74 FEET; THENCE NORTH 82°54'57" WEST, 600.80 FEET; THENCE NORTH 00°39'40" WEST, 154.81 FEET; THENCE SOUTH 89°44'39" EAST, 307.26 FEET; THENCE SOUTH 84°35'57" EAST, 36.20 FEET; THENCE NORTH 33°59'16" EAST, 174.93 FEET; THENCE SOUTH 89°17'03" EAST, 285.35 FEET; THENCE ALONG THE ARC OF A 556.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 13°45'22" A DISTANCE OF 133.49 FEET TO A POINT THAT BEARS SOUTH 83°25'06" EAST, 133.17 FEET FROM THE LAST DESCRIBED POINT; THENCE SOUTH 74°48'03" EAST, 41.77 FEET; THENCE ALONG THE ARC OF A 320.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 07°43'27", A DISTANCE OF 43.14 FEET TO A POINT WHICH BEARS SOUTH 77°01'25" EAST, 43.11 FEET FROM THE LAST DESCRIBED POINT, SAID POINT BEING THE POINT OF BEGINNING; CONTAINING 6.524 ACRES.

EXISTING LEASE PARCEL 2

A TRACT OF LAND IN SECTION 2, TOWNSHIP 1 NORTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF PORTLAND, MULTNOMAH COUNTY, OREGON BEING DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHICH BEARS SOUTH 35°11'22" EAST, 2277.87 FEET FROM A 4-INCH DIAMETER BRASS DISC SET IN CONCRETE INSIDE A MONUMENT BOX STAMPED "SW CORNER OF GATTON DLC."; THENCE SOUTH 06°59'23" WEST, 34.30 FEET; THENCE NORTH 83°21'30" WEST, 51.00 FEET; THENCE NORTH 06°59'23" EAST, 16.31 FEET; THENCE NORTH 77°14'53" EAST, 54.18 FEET TO THE POINT OF BEGINNING; CONTAINING 0.030 ACRES.

EXISTING LEASE PARCEL 3

A TRACT OF LAND IN SECTION 2, TOWNSHIP 1 NORTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF PORTLAND, MULTNOMAH COUNTY, OREGON BEING DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHICH BEARS SOUTH 18°16'17" EAST, 1890.64 FEET FROM A 4-INCH DIAMETER BRASS DISC SET IN CONCRETE INSIDE A MONUMENT BOX STAMPED "SW CORNER OF GATTON DLC."; THENCE SOUTH 07°11'11" WEST, 14.00 FEET; THENCE NORTH 82°48'49" WEST, 30.00 FEET; THENCE NORTH 07°11'11" EAST, 14.00 FEET; THENCE SOUTH 82°48'49" EAST, 30.00 FEET TO THE POINT OF BEGINNING; CONTAINING 0.010 ACRES.

MODIFIED LEASE AGREEMENT PARCEL A

A TRACT OF LAND IN SECTION 2, TOWNSHIP 1 NORTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF PORTLAND, MULTNOMAH COUNTY, OREGON BEING DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERLY LINE OF THE PREVIOUSLY DESCRIBED "EXISTING PARCEL 1", WHICH POINT BEARS SOUTH 89°44'39" EAST, 48.69 FEET FROM THE MOST NORTHWESTERLY CORNER OF SAID PARCEL; THENCE NORTH 00°15'21" EAST, 46.79 FEET; THENCE SOUTH 44°35'13" EAST, 32.72 FEET; THENCE ALONG THE ARC OF A 373.06 FOOT RADIUS CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 06°22'03", A DISTANCE OF 34.95 FEET TO A POINT ON THE NORTHERLY LINE OF SAID "EXISTING PARCEL 1", WHICH POINT BEARS SOUTH 47°16'15" EAST, 34.94 FEET FROM THE LAST DESCRIBED POINT; THENCE ALONG SAID NORTHERLY LINE NORTH 89°44'39" WEST, 48.84 FEET TO THE POINT OF BEGINNING; CONTAINING 0.025 ACRES.

MODIFIED LEASE AGREEMENT PARCEL B

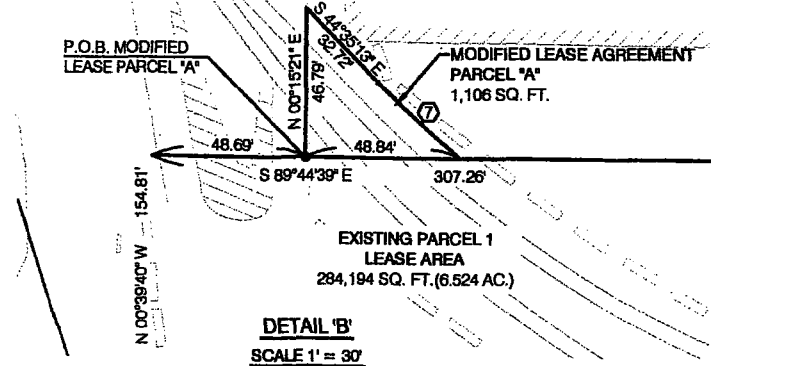
A TRACT OF LAND IN SECTION 2, TOWNSHIP 1 NORTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF PORTLAND, MULTNOMAH COUNTY, OREGON BEING DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHICH BEARS SOUTH 14°24'49" EAST, 1265.54 FEET FROM A 4-INCH DIAMETER BRASS DISC SET IN CONCRETE INSIDE A MONUMENT BOX STAMPED "SW CORNER OF GATTON DLC."; SAID POINT BEING ON A LINE THAT IS PARALLEL WITH AND 10.00 FEET NORTHEASTERLY OF THE CENTERLINE OF TRACK "401"; THENCE ALONG SAID PARALLEL LINE SOUTH 62°05'13" EAST 48.11 FEET; THENCE ALONG THE ARC OF A 393.06 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 24°32'24" A DISTANCE OF 168.35 FEET TO A POINT WHICH BEARS SOUTH 49°49'01" EAST, 167.07 FEET FROM THE LAST DESCRIBED POINT; THENCE SOUTH 37°32'49" EAST, 97.13 FEET; THENCE SOUTH 04°01'59" EAST, 36.22 FEET TO A LINE THAT IS PARALLEL WITH AND 10.00 FEET SOUTHWESTERLY OF THE CENTERLINE OF TRACK "401"; THENCE NORTH 37°32'49" WEST, 127.39 FEET; THENCE ALONG THE ARC OF A 373.06 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 24°32'24" A DISTANCE OF 159.78 FEET TO A POINT WHICH BEARS NORTH 49°49'01" WEST, 159.57 FEET FROM THE LAST DESCRIBED POINT; THENCE NORTH 82°05'13" WEST, 48.11 FEET; THENCE LEAVING SAID PARALLEL LINE NORTH 27°54'47" EAST, 20.00 FEET TO THE POINT OF BEGINNING; CONTAINING 0.149 ACRES.

MODIFIED LEASE AGREEMENT PARCEL C

A TRACT OF LAND IN SECTION 2, TOWNSHIP 1 NORTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF PORTLAND, MULTNOMAH COUNTY, OREGON BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE EASTERLY LINE OF THE ABOVE DESCRIBED "EXISTING PARCEL 1" AND A LINE THAT IS PARALLEL WITH AND 10.00 FEET NORTHWESTERLY OF THE CENTERLINE OF TRACK "402"; THENCE ALONG THE ARC OF A NON-TANGENT 685.09 FOOT RADIUS CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 48°22'19" A DISTANCE OF 578.39 FEET TO A POINT WHICH BEARS NORTH 43°30'47" EAST, 561.36 FEET FROM THE PREVIOUSLY DESCRIBED POINT; THENCE SOUTH 70°40'22" EAST, 20.00 FEET TO A POINT OF NON-TANGENCY THAT IS 10.00 FEET SOUTHEASTERLY AND PARALLEL TO THE CENTERLINE OF SAID TRACK "402"; THENCE ALONG THE ARC OF A NON-TANGENT 705.09 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 06°43'49" A DISTANCE OF 82.82 FEET TO A POINT WHICH BEARS SOUTH 22°41'32" WEST, 82.77 FEET FROM THE PREVIOUSLY DESCRIBED POINT; THENCE SOUTH 66°38'07" EAST, 18.01 FEET; THENCE ALONG THE ARC OF A NON-TANGENT 687.00 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 44°04'09" A DISTANCE OF 528.41 FEET TO A POINT ON THE EASTERLY LINE OF SAID "EXISTING PARCEL 1" WHICH POINT BEARS SOUTH 45°23'57" WEST, 515.48 FEET FROM THE LAST DESCRIBED POINT; THENCE ALONG SAID EASTERLY LINE NORTH 27°02'39" WEST, 50.49 FEET TO THE POINT OF BEGINNING; CONTAINING 0.582 ACRES.



NOTES:

THE BEARINGS IN THIS DESCRIPTION ARE BASED UPON PORT OF PORTLAND CONTROL DRAWING NO. "MD PG 2003-3024".

THE PURPOSE OF THIS DRAWING IS TO SHOW THE LIMITS OF THE PROPOSED AMENDED LEASE AGREEMENT, AS INDICATED BY MODIFIED LEASE AGREEMENT PARCELS "A", "B" AND "C".

THE LOCATION OF THE AMENDMENT HAS BEEN DETERMINED BY THE SURVEYED AS-BUILT LOCATION OF THE IMPROVEMENTS CONSTRUCTED IN 2006.

PORT OF PORTLAND DRAWING NO. "T4 93-7" WAS USED TO ESTABLISH THE OUTBOUNDS OF EXISTING PARCELS 1, 2 & 3. THE BEARINGS OF SAID PARCELS BEING ROTATED 01°31'34" COUNTERCLOCKWISE TO MATCH THE BASIS OF BEARINGS OF THIS DESCRIPTION.

PORT OF PORTLAND PORTLAND, OREGON										REGISTERED PROFESSIONAL LAND SURVEYOR VINCENT W. LOGAN 70712 SIGNED: 9-21-10 RENEWAL: 12-31-10										DESIGNED BY: V. LOGAN DRAWN BY: V. LOGAN CHECKED BY: C. VANDERWERF DATE: APRIL 2009 SCALE: 1" = 100'										TERMINAL 4 KINDER MORGAN BULK TERMINAL AMENDED LEASE PLAT SUBMITTED BY: DOYLE ANDERSON TYPE: EP DRAWING NO: T4 2004-4 1/1 (SU-1)									
PROJECT MANAGER 20030044 DESIGN NUMBER										1065 PROJECT NUMBER																													
NO. DATE BY REVISIONS CRD APPVO										NO. DATE BY REVISIONS CRD APPVO																													
04/22/09 VWL REVISED MODIFIED LEASE PARCELS										09/03/04 PWS ADDED PREFERENTIAL DOCK AREA										08/22/04 CMV ADDED PARCEL "C" TO LEASE PLAT																			

**AMENDMENT NO. 7
TO
AND ASSIGNMENT OF
TERMINAL LEASE
AMONG
KINDER MORGAN OPERATING L.P. "C"
KINDER MORGAN BULK TERMINALS, INC. (f/k/a Hall-Buck Marine, Inc.)
AND
THE PORT OF PORTLAND**

This Amendment No. 7 ("Amendment") is executed by the Port of Portland, a port district organized under the laws of the State of Oregon ("Port"), Kinder Morgan Operating L.P. "C", a Delaware limited partnership ("Lessee"), and Kinder Morgan Bulk Terminals, Inc., a Louisiana corporation ("KMBT"), effective as of July 1, 2004.

RECITALS

A. The Port is "Lessor" under a certain terminal lease (Port Agreement No. 87-109, at the Port's Marine Terminal No. 4) with KMBT, as lessee, dated October 30, 1987, as amended by Amendment No. 1 thereto dated November 24, 1993, as further amended by Amendment No. 2 thereto dated July 1, 1999, as further amended by Amendment No. 3 thereto dated July 1, 2003, and as further amended by Amendment No. 4 thereto dated December 31, 2003, as further amended by Amendment No. 5 thereto dated March 31, 2004, and as further amended by Amendment No. 6 thereto dated June 30, 2004 (Collectively, the "Lease").

B. The Lease expires September 30, 2004; provided that, notwithstanding the foregoing to the contrary, the parties wish to further modify the Lease effective as of and following the date first written above, extend the term of the Lease and effect assignment of the Lease by KMBT to Lessee.

NOW, THEREFORE, in consideration of the covenants and promises contained in this Amendment, the parties agree, effective as of and following the date first written above, as follows:

REVISED ARTICLE 1 - PREMISES

Description

Section 1.1 of the Lease is hereby deleted in its entirety and replaced with the following:

As of the effective date of this Amendment, the "Premises" as defined in the Lease, shall be the real property consisting of approximately 6.56 acres as specifically outlined on Drawing #T4 2004-13 attached as Exhibit A2, including rails, associated buildings, and utilities. Upon completion of the New Rail Improvement, as required under Section 5 of this Amendment, the new rail track from the point of switch into the unloading facility shall become a part of the Premises. After final construction of the New Rail Improvement and completion of an As-Built survey thereof, Exhibit A2 will be replaced with a new Exhibit upon mutual acceptance of the parties, and the new acreage and outline of the Premises contained therein shall be incorporated into and effective under this Amendment.

Preferential Use

The following sentence shall be added to Section 1.2

Exhibit A2 shall be substituted for the original Exhibit A, and the replacement Exhibit 1 under Amendment No. 1.

1.5 Use of Premises

The first sentence of Section 1.5 of the Lease is deleted in its entirety and replaced with the following:

Lessee shall use the Premises only for the following purposes: Construction and operation of a facility for the export of soda ash, and other bulk products as approved by the Port in writing, such approval not to be unreasonably withheld (the "Permitted Uses"). Lessee and its Associates may use Hazardous Substances on the Premises in connection with Lessee's use of the Premises for a soda ash bulk loading facility. Lessee and its Associates may not (except as consented to by the Port, such consent not to be unreasonably withheld) use the Premises for any of the following purposes: additional underground storage tanks; pesticide mixing and blending; PCB-containing structures and equipment; or a regulated underground injection control well. The transfer of Hazardous Substances, including without limitation fuel and lubricants, to vessels from the Premises and the Preferential Use Area (as contemplated in Section 1.2 of this Lease) shall be permitted in accordance with the Port's tariff and BMPs (hereinafter defined).

The following new section 1.7 is added:

Section 1.7 – "Associates"

The term "Associates" shall include, in respect of a Party, such Party's affiliates, and its and their respective directors, commissioners, officers, employees, agents and contractors but does not include trespassers.

REVISED ARTICLE 2 - TERM

Sections 2.1 and 2.2 of the Lease are deleted in their entirety and replaced with the following:

2.1 Term

The term of the Lease shall be extended to December 31, 2010.

2.2 Renewal Options

If the Lessee is not then in default in any material respect under the Lease, Lessee shall have the following options to renew this Lease on the same terms and conditions:

First Option: Lease expiration through December 31, 2012

Second Option: January 1, 2013 through December 31, 2014

The Lessee shall be permitted to exercise the option extension in writing at any time during the Lease term prior to six (6) months before the then-current expiration date.

REVISED ARTICLE 3 – RENTS

3.1 Rent Prior to Substantial Completion

Section 3.1 shall be deleted in its entirety.

3.2 Monthly Rent

Section 3.2 shall be deleted in its entirety and replaced with the following:

Lessee shall pay to the Port during the term of this Lease annual rent of One Million One Hundred Thousand and 00/100 Dollars ~~(\$1,100,000.00)~~ ("Annual Rent") in advance, in monthly payments of Ninety-One Thousand Six Hundred Sixty-Six and 67/100 Dollars ~~(\$91,666.67)~~ ("Monthly Rent"); provided that the Annual Rent (and proportionally the Monthly Rent) shall increase by a one time One Hundred Fifty Thousand and No/100 Dollars ~~(\$150,000.00)~~ amount

*\$12,500/month increase
after dredging # July 2001*

commencing the month immediately following substantial completion of the Dock Modification. Commencing on July 1, 2005, and on each July 1 thereafter during the term of this Lease, the Annual Rent and the Monthly Rent shall automatically increase by one and one-half percent (1.5%). Rent is subject to abatement in accordance with subsection 3.9 below.

per year

3.3 Throughput Charges

Section 3.3 shall be deleted in its entirety.

3.4 Adjustment to throughput charge

Section 3.4 shall be deleted in its entirety.

3.8 Time and Place of Payments:

Section 3.8 shall be deleted in its entirety.

The following new Section 3.9 is added:

3.9 Rent Abatement

The rent due for a particular month shall be reduced by one three-hundred-fiftieth (1/350) of the then Annual Rent for each day outside a Work Window (defined below) on which the Port's activities unreasonably interfere with Lessee's loading of vessels or unloading of rail cars at the Premises, except to the extent the unreasonable interference arises from the negligent, grossly negligent or willful acts or omissions of Lessee or its Associates or to the extent Lessee disregards the Port's notice pursuant to the third to last sentence of this Section 3.9 and loads vessels and unloads railcars notwithstanding such notice. Interference is unreasonable for the purposes of this section if it reduces (or is likely to reduce) throughput by more than 50 percent, or suspends or prevents (or is likely to suspend or prevent) Lessee's railcar unloading or vessel loading for more than four hours in any eight hour work shift. The Port shall provide prior notice to Lessee if the Port's activities are likely to unreasonably interfere with Lessee's loading of vessels or unloading of rail cars. The rent abatement is not a liquidated damage. Rent abatement shall be netted against any damages Lessee recovers from the Port in respect of the matters discussed in this section.

REVISED ARTICLE 4 – LESSEE OBLIGATIONS

The following paragraphs are hereby added as new Sections 4.16 and 14.17 of the Lease:

4.16 Rail Progressor

Concurrently with the Port's construction of the New Rail Improvement identified in Section 5, Lessee shall undertake at Lessee's cost all improvements and modifications necessary to install a rail progressor that meets Lessee's operational requirements at the Premises.

4.17 Bulk Outloader Improvements

When?
July 1, 2007

Lessee shall conduct development and engineering feasibility analysis for bulk outloader improvements that would improve the efficiency, human safety, and environmental compliance of material handling and operations on the Premises. The Port will cooperate in the feasibility analysis. Said analysis will be completed within thirty six (36) months of execution of this Amendment, with copy delivered to the Port.

REVISED ARTICLE 5 - PORT OBLIGATIONS

Section 5.2 is amended to read:

5.2 Dredging

The Port will dredge, maintain, and, following the substantial completion of the Dock Modification, warrant, a minus forty (-40)-foot depth, Columbia River Datum, at Berths 410 and 411; provided that, the depth at the fender line is temporarily limited to minus thirty five (-35) feet, Columbia River Datum, transitioning to minus forty (-40) feet, Columbia River Datum, at a point fifteen and one-half (15.5) feet horizontally on a perpendicular from the fender line until substantial completion of the Dock Modification.

The following paragraph is hereby added as a new Section 5.5 of the Lease:

5.5 – New Rail Improvement and Dock Modification

The Port, at its cost, will design and install on or prior to January 31, 2006 a sheet pile bulkhead along the face of Berth 410 and Berth 411 and shall dredge and remove the existing toe of slope that extends into each of such berths to provide and maintain a depth of minus forty (-40) feet, Columbia River Datum, at the fender line (the "Dock Modification"). The Port, at its cost, will design and install rail trackage improvements and related improvements (including without limitation stormwater collection and treatment facilities for rail trackage outside the Premises) (the "New Rail Improvement") to remove existing loading tracks from the dock and pier and relocate them onto land at Pier 2. The Port shall work with Lessee throughout the design and construction of the New Rail Improvement to optimize the design and construction of the New Rail Improvement. The Port shall, at its own cost and expense, maintain the New Rail Improvement in good operating condition and in good repair. A three railcar cut on the tail track (provided the parties seek to achieve a four railcar cut) and existing sixty (60) empty and two hundred (200) loaded rail car capacity will be provided by the Port at the railyard immediately adjacent to the Premises. If Lessee desires track capacity at the Premises additional to that set forth in the immediately preceding sentence or modifications to Lessee's storm water drainage system at the Premises, then terms for payment by Lessee will be mutually determined prior to completion of the design thereof. The Port's design and construction of the New Rail Improvement will begin immediately after execution of this Amendment, with design and construction anticipated to be approximately twenty-four (24) months in duration. A conceptual design drawing of the Dock Modification and New Rail Improvement is attached as Exhibit B.

REVISED ARTICLE 6 - INDEMNITY AND INSURANCE

Section 6.1 of the Lease shall be deleted in its entirety and replaced with the following:

6.1 Hold Harmless Indemnification Clause

Lessee agrees to defend (using legal counsel selected by Lessee and reasonably satisfactory to the Port) indemnify, and hold harmless the Port and the Port's commissioners, agents and employees from and against any and all claims, damages, expenses, costs, fees (including, but not limited to, the following reasonable third party fees: attorney, accountant, paralegal, expert, and escrow), fines, Environmental Costs (as defined in Section 10.1.6 of this Amendment) and/or penalties (collectively "Costs"), to the extent arising from any of the following: (a) any negligent, grossly negligent or willful act or omission of Lessee or its Associates; (b) any operations or activities of Lessee or its Associates on the Premises; (c) any breach, violation or nonperformance in any material respect of any of Lessee's obligations under this Lease; (d) any breaches in any material respect by Lessee or its Associates of any applicable law, statute, regulation, rule, ordinance or order; or (e) any Hazardous Substance Release by Lessee or its Associates. Notwithstanding anything in this Amendment (or in the Lease as it existed prior to this Amendment) to the contrary, the indemnity provided in this first paragraph of Section 6.1 applies to natural resource damages (as defined by CERCLA, 42 USC 9607; Clean Water Act, 33 USC 1321(f)(4) and the Oil Pollution Act, 33 USC 2706 and regulations at 43 CFR Part 11 and 15 CFR Part 990) only to the extent the natural resource damages arise from violations and noncompliance in any material

respect with applicable Environmental Laws and any provision of Article 10 that occur following the effective date of this Amendment.

To the extent permitted by Oregon law, and subject to limits equal to those established by ORS 30.270, the Port agrees to defend (using legal counsel selected by the Port and reasonably satisfactory to Lessee) indemnify, and hold harmless Lessee and Lessee's affiliates and its and their directors, officers, agents and employees from and against any and all claims, damages, expenses, costs, fees (including, but not limited to, the following reasonable third party fees: attorney, accountant, paralegal, expert, and escrow), fines, Environmental Costs (as defined in Section 10.1.6 of this Amendment) and/or penalties (collectively "Costs"), to the extent arising from any of the following: (a) any negligent, grossly negligent or willful act or omission of the Port or its Associates; (b) any operations or activities of the Port or its Associates; (c) any breach, violation or nonperformance in any material respect of any of the Port's obligations under this Lease; (d) any breaches in any material respect by the Port of any applicable law, statute, regulation, rule, ordinance or order; or (e) any Hazardous Substance Release by the Port or its Associates.

Each party shall include in future third-party contracts under which the contractor has access to the Premises or Preferential Use Area a provision requiring the contractor to indemnify (and provide general liability insurance naming as additional insureds the following persons/entities and with a waiver of subrogation benefiting such persons/entities) the other party hereto and that party's affiliates, directors, commissioners, officers, employees, and agents against claims arising from the activities on the Premises and the Preferential Use Area and the negligence, gross negligence and willful misconduct of the contractor and the contractor's employees, subcontractors and agents; provided, the Port shall use its commercially reasonable efforts to cause Governmental Entities to require their contractors that access the Premises or Preferential Use Area to agree to similarly indemnify (and similarly provide insurance) the Port and Lessee and their respective affiliates, directors, commissioners, officers, employees, and agents.

6.2 Environmental Insurance

The following paragraphs shall be added at the end of Section 6.2:

Lessee shall maintain a pollution legal liability policy or policies including coverage for gradual, sudden and accidental pollution on land and or water, including first party clean up and remediation of the property, which names the Port as additional insured, and including coverage for losses arising from the use or operation of underground and aboveground storage tanks occurring on or in any way related to the Premises or occasioned by reason of the operations of Lessee, in an amount of not less than One Million dollars (\$1,000,000.00) per claim. Coverage shall be maintained continuously in force throughout the term of this Lease, including any obligations remaining after termination. If coverage is of claims-made type, coverage shall be maintained for not less than two years after post-termination obligations are completed. If Lessee changes insurance carriers during the required coverage period, to the extent same is available at commercially reasonable rates and terms, continuity of coverage shall be maintained by keeping the original retroactive date or Lessee shall purchase prior-acts coverage with the new insurer. The final two years of coverage may be provided using an extended reporting endorsement (tail coverage).

Lessee shall maintain in full force and effect at all times during the term of this Lease such financial assurance, including any insurance, as is required by any applicable law or regulation with respect to Lessee's installation, operation, corrective action, removal, closure, and decommissioning of an AST Facility or UST Facility on the Premises, including that required by OAR 340-150-0001 through 0166, based on 40 C.F.R. Part 280. If Lessee fails at any time

during the term of the Lease to comply with applicable AST Facility or UST Facility financial assurance requirements, or if financial assurance is not required by law, Lessee shall provide independent AST Facility and UST Facility financial assurance to the Port in the amount of Two Hundred Fifty Thousand Dollars (\$250,000.00) in a form acceptable to the Port.

REVISED ARTICLE 8 – TERMINATION

The language of Article 8 shall be deleted in its entirety and replaced with the following:

Upon termination of this Lease for default or through the passage of time, or at the end of the option periods, whichever shall occur first, Lessee shall surrender possession of the dry bulk export facility (as defined in that certain Terminal Dry Bulk Export Facility Construction Contract attached as Exhibit D to the Terminal Use and Development Lease dated October 30, 1987 (the "Original Facility"), the Bulk Storage Facility (as defined in Amendment No. 1), including without limitation all AST Facilities and UST Facilities, and Premises peacefully and promptly, and shall, subject to Section 10, at the option of the Port evidenced by written notice to Lessee: (a) remove the Original Facility and the Bulk Storage Facility (except rail tracks from the Premises) within six (6) months after termination and restore the surface land of that part of the Premises occupied by the Original Facility and the Bulk Storage Facility to its condition immediately prior to the Lessee's occupation thereof under the Lease of October 30, 1987, all at the expense of Lessee; (b) surrender the Original Facility and the Bulk Storage Facility, free of all encumbrances, liens, or security interests, as the property of the Port without requirement of the payment of any compensation or consideration by the Port; or, (c) remove only certain elements of the Original Facility and Bulk Storage Facility designated by the Port in writing and restore the surface land of that part of the Premises occupied by those designated elements to its condition immediately prior to Lessee's occupation thereof under the Lease of October 30, 1987, and surrender the remaining elements free of all encumbrances, liens, or security interests, as the property of the Port without requirement of the payment of any compensation or consideration by the Port. If the Port has not established a depth of minus forty (-40) feet, Columbia River Datum, at the fender line in Berth 410-411 by January 31, 2006, Lessee may terminate the Lease by providing at least 90 days prior written notice to the Port at any time prior to January 31, 2007.

REVISED ARTICLE 9 - ACCESS FOR INVESTIGATION & CLEANUP

The last sentence in section 9.5 is deleted in its entirety.

Sections 9.16 and 9.17 are hereby deleted in their entirety and the following paragraphs substituted:

9.16 Administrative Order

Lessee acknowledges that the Port is bound by the terms of the USEPA Administrative Order on Consent for a Remedial Investigation and Feasibility Study of the Portland Harbor Superfund Site, CERCLA Docket No. 10-2001-0240 effective September 28, 2001 and the USEPA Administrative Order on Consent for Removal Action of the Terminal 4 Removal Action Area, CERCLA Docket No. 2003-256, effective October 2, 2003 (the "EPA AOCs"). Lessee acknowledges that the Port is bound by the terms of the Department of Environmental Quality ("DEQ") Voluntary Cleanup Program Remedial Investigation, Source Control and Feasibility Study Agreement effective December 4, 2003 (the "DEQ Agreement"). Lessee acknowledges it has received complete copies of the EPA AOCs and the DEQ Agreement and is familiar with their terms and especially the Port's responsibility to investigate and clean up the Terminal 4 Removal Action Area (as defined in the EPA AOCs) and the Terminal 4 Slip 1 Upland Facility (as defined in the DEQ Agreement). The Terminal 4 Removal Action Area is defined as that portion of the Portland Harbor Superfund Site adjacent to and within the Port of Portland's

Terminal 4 at 11040 North Lombard, Portland, Multnomah County, Oregon: extending west from the ordinary high water line on the northwest bank of the lower Willamette River to the edge of the navigational channel and extending south from the downstream end of Berth 414 to the downstream end of Berth 401, including Slip 1, Slip 3 and Wheeler Bay Slip 3, as depicted generally on Exhibit C. The Terminal 4 Slip 1 Upland Facility also is depicted generally on Exhibit C. Lessee acknowledges that the Premises, which include a portion of the New Rail Improvement and the areas of its Preferential Use rights are within or adjacent to the Removal Action Area covered by the EPA AOCs and within the Terminal 4 Slip 1 Upland Facility covered by the DEQ Agreement. Every half year commencing July 2004, or more frequently as mutually agreed by the parties, the Port shall meet with Lessee to brief it on the status of its implementation of the EPA AOCs and the DEQ Agreement as relevant to Lessee's operations at and in the vicinity of the Premises and to receive input from Lessee on how the Port's contemplated investigation or remedial activities may impact Lessee's business operations.

9.17 Port and Other Third Party Access

During the Annual Work Window, the Project Work Windows, and any other mutually agreed upon Work Windows, or outside of such work windows but subject to rent abatement (as contemplated in Section 3.9 of this Lease), but subject to the requirements set forth in Article 15 below, the Port, its employees, agents, licensees, invitees (including without limitation the USEPA, the DEQ, the tribal governments, natural resource trustees, and their representatives and agents covered by the EPA AOC and the DEQ Agreement ("Governmental Entities"), representatives and contractors shall have the right upon reasonable prior written notice to Lessee from the Port, to enter upon the Premises to perform all activities required under the DEQ Agreement and the EPA AOC, including without limitation implementation of any remedial investigation, source control, feasibility study, or other remedial activities that are required of the Port by the Governmental Entities. Except in cases of emergency, entry upon the Premises shall be made with reasonable advance notice to Lessee, shall be during normal business hours of Lessee, and shall minimize interference with the rights and operations of Lessee on the Premises. Nothing in this section shall be deemed to limit the Port's rights to enter the Premises under this Lease, including without limitation section 4.13. This section does not affect the Port's unrestrained right to enter areas outside the Premises (not through the Premises), including without limitation other areas of Terminal 4, Slip 3, and Wheeler Bay.

NEW ARTICLE 10 – ENVIRONMENTAL

Section 4.14 (also known as Article 14 in Amendment No. 1) shall be deleted and the following added as new Sections:

10.1 Definitions

The following definitions shall apply to the Lease. Additional terms are defined directly in the text of the Lease.

10.1.1 AST Facility

"AST Facility" shall include aboveground storage tanks, interpreted in the broadest sense, including portable storage tanks, aboveground piping, dispensers, related underground and aboveground structures and equipment, including, but without limitation, associated spill containment features and oil/water separators, and the surrounding area used in connection with the operation for fueling and other management of Hazardous Substances.

10.1.2 UST Facility

"UST Facility" shall include underground storage tanks, underground piping, dispensers, related underground and aboveground structures and equipment, interpreted in the broadest sense, including without limitation spill containment features and oil water separators (except these oil water separators to be used, pursuant to this Lease, in connection with the management of industrial wastewater or stormwater), the system of monitoring wells to monitor surrounding environmental conditions, and the surrounding area used in connection with the operation, activity or purpose for which the entire system is designed, including without limitation the fueling of motor vehicles and the containment of chemical products or other material.

10.1.3 Best Management Practices

Best Management Practices ("BMPs") shall mean those environmental or operational standards or guidelines specifying common and accepted practices appropriate for business operations or such standards or guidelines as have been articulated by pertinent trade associations, professional associations or regulatory agencies, including BMPs developed by the Port in cooperation with its tenants, including BMPs developed by the Port in cooperation with Lessee.

10.1.4 Authorized Material

"Authorized Material" means petroleum products and sulfuric acid.

10.1.5 Environmental Audit

"Environmental Audit" means an environmental site assessment or compliance audit conducted of the Premises and Preferential Use Area that is consistent with CERCLA Section 101(35)(B) (42 U.S.C. § 9601(35)(B)), 40 CFR Part 312, and ORS 465.255(6) and any other appropriate assessment or auditing standard, including ASTM Standard E2107-00 Standard Practice for Environmental Regulatory Compliance Audits, or its successor, and ISO 14000 series standards relating to Environmental Management System Audits, or their successors, (ISO 14001 96 EMS Specification with guidance for use; ISO 14010 96 Guidelines for environmental auditing, General principles; ISO 14011 96 Guidelines for environmental auditing, Audit procedures, auditing of environmental management systems; ISO 14012 96 Guidelines for environmental auditing, Qualification criteria for environmental auditors).

10.1.6 Environmental Costs

"Environmental Costs" means damages (including natural resource damages as defined by CERCLA, 42 USC 9607; Clean Water Act, 33 USC 1321(f)(4) and the Oil Pollution Act, 33 USC 2706 and regulations at 43 CFR Part 11 and 15 CFR Part 990), fines, costs, and fees arising from any violation of or noncompliance in any material respect with any applicable Environmental Law or any provisions of Article 10, and includes reasonable, necessary and documented oversight and participation costs of governmental agencies and reasonable, necessary and documented fees and costs of project managers, attorneys, legal assistants, engineers, consultants, accountants, and experts.

10.1.7 Environmental Law

"Environmental Law" shall be interpreted in the broadest sense to mean any and all federal, State of Oregon and local laws, regulations, rules, permit terms, codes, orders and ordinances and enforceable guidance documents, now or hereafter in effect, as the same may be amended from time to time, and applicable decisional and common law, which govern materials, substances, regulated substances and wastes, petroleum products, emissions, pollutants, water, stormwater, wellfield and wellhead protection, cultural resources protection, animals or plants, noise, or products and related to the protection of health, natural resources, safety or the environment.

10.1.8 Hazardous Substance

“Hazardous Substance” shall be interpreted in the broadest sense to mean any and all substances, including Authorized Material, emissions, pollutants, materials, product, or contaminants defined or designated as hazardous, toxic, radioactive, dangerous or regulated wastes or materials or any other similar term in or under any Environmental Law. Hazardous Substance shall also include, but not be limited to, fuels, petroleum and petroleum-derived products.

10.1.9 Hazardous Substance Release

“Hazardous Substance Release” shall be interpreted in the broadest sense to mean the spilling, discharge, deposit, injection, dumping, emitting, releasing, leaking, migrations, placing, or seeping of any Hazardous Substance on or from the Premises into the environment, including land, sediments, water, groundwater, and stormwater except as specifically authorized by a valid permit issued under applicable Environmental Law, including an imminent threat of a release.

10.1.10 Spill Prevention and Response Plan

“Spill Prevention and Response Plan” (“SPAR Plan”) means any written plan required by Environmental Law and/or a required by the Port under Section 10.5.2 of this Amendment for the Premises, prepared by the Lessee to address fueling practices, spill prevention, containment, spill source control, immediate removal, remediation other corrective action and related management, training, operational and monitoring activities and other requirements to prevent and address any Hazardous Substance Release.

10.2 General Environmental Obligations of Lessee

Lessee shall manage and conduct all of its activities, and shall use commercially reasonable efforts to cause its Associates to conduct their activities, on the Premises: (i) in compliance in all material respects with Environmental Laws and the environmental provisions of the Lease; (ii) so as to prevent any violation in any material respect of Environmental Law by Lessee or its Associates; (iii) in cooperation with the Port in the Port’s efforts to comply in any material respects with Environmental Law; and (iv) in compliance with BMPs applicable to Lessee’s use of the Premises.

Lessee shall maintain Material Safety Data Sheets (MSDSs) for each Hazardous Substance used by Lessee or its Associates on the Premises and will provide copies to the Port upon request.

10.3 Environmental Audits

10.3.1 Initial Audit and Environmental Baseline

The Port makes no representations or warranties regarding the condition of the Premises. Prior to, or as soon as is practicable after (but in no event later than thirty (30) days following) the date of this Amendment, the Port, at its sole cost and expense, will define, subject to review and comment by Lessee, and conduct a Phase 1 Environmental Site Assessment (ESA) of the Premises, including without limitation the New Rail Improvement (“Initial Audit”). Lessee and the Port acknowledge that in connection with the Lease the Initial Audit shall be used as a baseline (“Environmental Baseline”) to assist in the allocation of future environmental liability between Lessee and the Port under the Lease.

10.3.2 Special and Periodic Audits

If the Port has a good faith reason to suspect that there is or has been a Hazardous Substance Release by Lessee or its Associates or significant material non-compliance with Environmental Law attributable to the acts or omissions of Lessee or its Associates, the Port may, after written communication of those reasons to Lessee, conduct an Environmental Audit of the

Premises (a "Special Audit"). If the Special Audit confirms such a Hazardous Substance Release or an imminent threat of such a Hazardous Substance Release or finds a significant material non-compliance with Environmental Law by Lessee or its Associates posing a threat of Hazardous Substance Release (collectively a "Material Violation"), then Lessee will be required to reimburse the Port for the Special Audit. If no Material Violation is found, the Port will pay for the Special Audit. In addition, upon the Port's prior request, from time to time but not before the second anniversary of the Effective Date of this Amendment, the Port may perform a periodic Environmental Audit of the Premises at its own cost ("Periodic Audit"). Copies of all Special or Periodic Audits will be provided to the Lessee at the Lessee's request.

10.3.3 Exit Audit

Prior to the termination of the Lease, the Port shall define, subject to review and comment by Lessee, and conduct an Environmental Audit of the Premises and New Rail Improvement ("Exit Audit"). The Exit Audit shall be of the same specifications and parameters as the Initial Audit Baseline, as expanded by any Special Audit or Periodic Audit (for specific areas within the Premises made the subject of such Special or Periodic Audit), and as further expanded as the parties may agree, and shall be performed by the same company if that company is reasonably available. The Exit Audit shall be performed and a complete copy of the results of the Exit Audit shall be provided to each party, not more than ninety (90) days but not less than thirty (30) days prior to the anticipated actual termination of the Lease. The Port and Lessee will share equally in the cost of the Exit Audit. Not less than thirty (30) days prior to the termination of the Lease, the Port may conduct a final inspection of the Premises to verify that there has been no change in its condition since the Exit Audit.

10.4 Storm Water Conveyance and Treatment; Underground Injection Controls

10.4.1 Stormwater Management

Stormwater generated on Lessee's Premises discharges into the Port's storm water management, treatment, conveyance and drainage system (the "Storm Water Management System") permitted under the Port's National Pollutant Discharge Elimination System Municipal Separate Storm Sewer Water Permit No. 101314) ("MS4 Permit"). Lessee shall manage storm water generated by Lessee and its Associates on the Premises discharging to the Storm Water Management System in compliance in all material respects with Environmental Law, including in compliance with the Port's MS4 Permit and any individual storm water discharge permit issued to Lessee. Lessee shall not discharge, and shall not allow Lessee's Associates to discharge, any vehicle or equipment wash water into the Storm Water Management System. At the Effective Date of this Amendment and annually thereafter, Lessee shall provide information to the Port demonstrating Lessee's compliance with Lessee's individual storm water management permits. Lessee may satisfy this obligation by providing the Port the opportunity to review and copy Lessee's current permit, storm water management plan, and any of Lessee's permit-required annual report(s). The Port and Lessee will periodically coordinate with one another regarding the actions they must take in order to implement their respective permits.

Lessee shall register with DEQ any and all types of Class V underground injection controls ("UIC") such as French drains, sumps, or dry wells utilized on the Premises, if required under Environmental Laws.

10.4.2 Release and Treatment of Industrial Waste Water

Lessee shall not, and shall cause its Associates to not release industrial waste water into any groundwater, surface water or other body of water, unless it meets in all material respects the requirements of all applicable Environmental Laws. The Port shall have the right, but not the

duty, to review and approve, such approval not to be unreasonably withheld, any industrial waste water treatment system Lessee might propose to use, or use, upon the Premises.

10.5 Authorization and Operation of Existing AST and UST Facilities

10.5.1 Consent to Operation and Design Requirements

The Port consents to the operation of Lessee's existing AST Facility and UST Facility by Lessee shown on **Exhibit D** attached hereto and in accordance with the Lease (collectively, the Lessee UST/AST Facilities"). The Lessee UST/AST Facilities are of the type, model, capacity, and equipment and components as described in attached **Exhibit E**. Lessee shall not manage any Hazardous Substances other than Authorized Material in the Lessee UST/AST Facilities. No other AST Facility or UST Facility, components, or Hazardous Substance contents stored therein may be substituted without the prior written consent of the Port, such consent not to be unreasonably withheld. Lessee is solely responsible for, the proper installation, operation, maintenance, use, removal and decommissioning of the Lessee UST/AST Facilities. The Lessee UST/AST Facilities shall be made of material compatible with the Authorized Material and shall include appropriate secondary containment fully to contain any Hazardous Substance Release.

10.5.2 Spill Prevention and Response ("SPAR") Plan

Lessee shall provide to the Port a written SPAR Plan that addresses the measures to be followed by Lessee to prevent, control, and perform corrective actions in the event of a Hazardous Substance Release. In addition to meeting all requirements of applicable law, the SPAR Plan shall address the measures Lessee will take to prevent Hazardous Substances Releases and immediately to respond to any Hazardous Substance Release. A copy of the SPAR Plan shall be maintained at the Premises, and a copy shall be provided to the Port within thirty (30) days of the Effective Date of this Amendment. The SPAR Plan shall be revised and updated to reflect current operations of Lessee and its Associates at the Premises as necessary, but at a minimum of every three (3) years. The Port shall be provided a copy of all such modifications.

In addition to any elements required by Environmental Law, Lessee shall address the following in its SPAR Plan: (i) procedures for the proper receipt, storage and dispensing of Authorized Material by Lessee and its Associates at the Premises, including the maintenance, observation and monitoring, safety checks, and safe practices applicable to the Lessee UST/AST Facilities; (ii) procedures for regular inspection of each above ground storage tank system within the Lessee UST/AST Facilities, including, but not limited to, confirmation that each such system and key components, such as pumps, hoses, and fittings, are in good and safe working condition; (iii) procedures for promptly, but in no case later than forty-eight (48) hours of acquiring relevant information or knowledge, notifying the Port of any suspected or confirmed Hazardous Substance Release, and for verbal and written notification to appropriate regulatory agencies under applicable Environmental Law required in connection therewith; (iv) operating procedures for spill contingency and emergency response to Hazardous Substance Releases, including the designation of individuals responsible for directing the removal, response and restoration actions for such releases; (v) procedures to address large Hazardous Substance Releases that on-site resources may be inadequate to manage, including, but not be limited to, identification of an outside twenty four (24) hour emergency response contractor to handle large Hazardous Substance Releases; (vi) procedures to keep the Port timely informed during the course of Lessee's response to a Hazardous Substance Release; (vii) provision for prompt use of on-site spill response equipment designed to keep a Hazardous Substance Release from reaching other property, storm water or sanitary sewers or area ground water or surface waters; (viii) provision for trained onsite personnel to operate any Lessee spill response equipment during filling and dispensing operations and to be available on call at all other times, (ix) provision for prompt regular submission to the Port of copies of all relevant permits, consents, approvals, reports, and

other correspondence with any regulatory agencies pertaining to the Lessee UST/AST Facilities and their compliance in any material respect with Environmental Laws; and (x) provision for training of personnel to implement Lessee's SPAR Plan and Lessee's compliance with applicable Environmental Law. The SPAR Plan can be fulfilled by other plans that encompass these measures.

10.5.3 Port's Right to Immediately Stop Operation in Emergency

The Port shall have the right to direct Lessee to cease operation of those portions of the Lessee UST/AST Facilities immediately upon delivery of written notice from the Port to the Lessee if the Port determines that the operation of same by Lessee (i) is not being undertaken by Lessee or its Associates in any material respect in accordance with applicable permits, approvals, laws or regulations, or (ii) constitutes an emergency, meaning an imminent endangerment to human health, safety, or welfare or the environment, or (iii) resulted in a Hazardous Substances Release.

10.5.4 Closure and Decommissioning of AST or UST Facility

Not less than thirty (30) days following the expiration or earlier termination of the Lease, Lessee shall provide written confirmation to Port that the Lessee UST/AST Facilities have been closed, removed, decommissioned, and disposed of in accordance with Environmental Law ("Closure") and that the Premises and any surrounding property to the extent impacted by operation of same by Lessee or its Associates has been remediated by Lessee to the Environmental Baseline. Lessee shall give the Port thirty (30) days advance written notice of any proposed closure of any Lessee AST Facility or UST Facility at the Premises. AST or UST Facility Closure in place is prohibited. Within thirty (30) days of Closure completion, Lessee shall provide to the Port copies of a final report of Closure, any remediation and restoration, and any, regulatory agency approvals thereof.

10.6 Lessee's Hazardous Substance Liability

10.6.3 Limitation on Lessee's Liability

Notwithstanding anything to the contrary in the Lease, Lessee shall have no responsibility for Hazardous Substance Releases that: (i) existed on, in, under, or from the Premises prior to the Effective Date of the Lease (i.e. October 30, 1987), except to the extent actively and knowingly contributed to or worsened by Lessee or its Associates or (ii) are caused after the Effective Date of the Lease (i.e., October 30, 1987) by the Port or its agents, licensees, directors, invitees, employees or contractors.

10.6.4 Environmental Investigation and Remediation

10.6.4.1 Immediate Response

To the extent of a violation in any material respect by Lessee or its Associates of applicable Environmental Laws, a violation in any material respect by Lessee of any provision of the Lease, a Hazardous Substance Release by Lessee or its Associates, or a reasonable suspicion of a Hazardous Substance Release by Lessee or its Associates, Lessee or its Associates shall immediately undertake and diligently pursue, at Lessee's sole expense, all action necessary and appropriate to investigate, contain, stop, accomplish source control, and remove such Hazardous Substance Release.

10.6.4.2 Remediation

Lessee shall promptly undertake, at Lessee's sole expense, all actions necessary to ensure that any Hazardous Substance Release by Lessee or its Associates is remediated to such a condition that a "No Further Action" letter or its equivalent is obtained from EPA, DEQ or other regulatory

agency with jurisdiction. In the alternative, Lessee may seek prior Port approval of remediation of such Hazardous Substance Release to risk-based levels under a conditional No Further Action determination. The Port may approve such an alternative approach in respect of such Hazardous Substance Release on condition Lessee assumes liability for any Environmental Costs subsequently incurred by the Port in respect of same within the ensuing ten (10) year period resulting from the residual Hazardous Substances associated with such Hazardous Substance Release and such alternative approach.

10.6.5 Intentionally Deleted.

10.6.6 Port's Rights of Notice, Review and Comment

Lessee shall provide to the Port copies of all of the immediate response, removal, or remediation action documents submitted to any regulatory agency in respect of a Hazardous Substance Release by Lessee or its Associates and shall allow the Port to submit reasonable comments thereon to Lessee and the regulatory agencies for thirty (30) days following the Port's receipt of such documents. In connection therewith, Lessee shall provide the Port copies of all substantive agency correspondence including but not limited to No Further Action documentation. Not later than thirty (30) days following completion of any immediate response, removal, or remediation action required by Lessee under the Lease in respect of a Hazardous Substance Release by Lessee or its Associates, Lessee shall provide the Port with a written report outlining, in reasonable detail, steps taken by Lessee or its Associates.

10.7 Port's Additional Rights Regarding Environmental Matters

The Port shall have the following additional rights:

10.7.1 Notice

Lessee shall promptly notify the Port upon becoming aware of: (a) a violation or alleged violation in any material respect of (i) any applicable Environmental Law related Lessee's operations at the Premises or (ii) any Hazardous Substance Release by Lessee or its Associates or reasonable suspicion of such. Notice shall be given to the Port via the Port's Environmental Incident Response Number; 503-548-1745. In addition, Lessee shall also notify the Port by calling the Port's Marine Security: (503) 240-2230. The Port shall promptly notify Lessee upon becoming aware of: (a) a violation or alleged violation in any material respect of (i) any applicable Environmental Law related the Port's activities at the Premises or (ii) any Hazardous Substance Release by the Port or its Associates or reasonable suspicion of such.

10.7.2 Split Sampling

Lessee shall notify the Port at least forty eight (48) hours in advance of any proposed sampling associated with a Hazardous Substance Release by Lessee or Associates in order to allow the Port to be present or to collect split samples. In respect thereof, Lessee shall provide the Port with copies of any sampling results and associated chain-of-custody and quality assurance and quality control information within ten (10) days of receipt by Lessee.

10.7.3 Port's Right of Self Help

Except in the event of an emergency or an agency order requiring immediate action, the Port shall have the right, upon giving Lessee fifteen (15) days prior written notice, stating the obligations in issue, to perform Lessee's obligations arising under the Lease in respect of a Hazardous Substance Release by Lessee or its Associates and charge Lessee the resulting Environmental Costs incurred by the Port or its agents, plus interest at the rate of eighteen percent (18%) per year on funds that were actually expended by the Port or its agents thereon from the date the applicable portion of such funds were so expended ("Self Help"). The Port may not commence

performance on behalf of Lessee under this Section if, within such notice period, Lessee promptly notifies the Port, begins, and continually thereafter diligently pursues to completion the performance of the obligations stated in the Port's notice.

10.7.4 EFFECT OF LEASE

Nothing in this Lease shall be deemed to imply that Lessee is responsible for contamination of sediments in the Willamette River. Nothing in the Lease shall be deemed to preclude a party from seeking to avail itself of a remedy or right provided by Oregon law.

NEW ARTICLE 11- WORK WINDOWS

A "Work Window" is a period established by this Lease or agreed to by the parties, and scheduled by written agreement, during which the Port may unreasonably interfere with Lessee handling Lessee's customers' cargo at the Premises in order for the Port to engage in activities in which it is obligated or has a right to engage under this Lease. The Port shall endeavor to limit all activities that unreasonably interfere with Lessee handling Lessee's customers' cargo at the Premises to Work Windows, but, when there is no feasible alternative, and only after coordinating with Lessee, may unreasonably interfere with Lessee handling Lessee's customers' cargo at the Premises outside Work Windows, subject to abatement of rent as provided in Section 3.9.; provided that, except in the event of an emergency, no work outside a Work Window shall be initiated in the event a train is at Terminal 4 for discharge or its arrival is imminent or a vessel is docked at the Premises or its arrival is imminent. In addition to scheduled Work Windows, Lessee agrees to cooperate with the Port in identifying or arranging periods during which the Port may perform work without precluding vessel loading.

The parties agree there are three types of Work Windows: (1) an "Annual Work Window;" (2) "Project Work Windows;" and (3) "Mutually Agreed Work Windows." Lessee and the Port shall meet semiannually to coordinate scheduling of Work Windows. The parties recognize that the nature of the Port's activities during a Work Window may require that Work Window be scheduled within one of the in-water work windows established by the Oregon Department of Fish and Wildlife ("ODFW In-Water Work Window"). ODFW In-Water Work Windows normally are July 1 through October 31 and December 1 through January 31 annually.

~~The Annual Work Window shall be a period of not more than 10 consecutive days to be scheduled by mutual agreement.~~ The Annual Work Window is intended primarily for maintenance dredging of Berth 410-411 and maintenance of the dock and rail facilities, but also may be used for other activities in which the Port is legally obligated to engage, including without limitation activities related to compliance with the EPA AOCs and DEQ Agreement. The Port shall specify the work to be performed during a particular Annual Work Window. If part of the work specified by the Port for a particular Annual Work Window may be performed only during an ODFW In-Water Work Window, the parties shall agree to schedule that Annual Work Window during an ODFW In-Water Work Window.

The parties agree to the following three Project Work Windows:

- (1) A Project Work Window of 21 consecutive days to be scheduled during the ODFW In-Water Work Window in January of 2005;
- (2) A Project Work Window of 21 consecutive days to be scheduled during the ODFW In-Water Work Window beginning on July 1, 2005; and
- (2) A Project Work Window of 7 consecutive days for rail connection work to be scheduled during 2006.

Notwithstanding the minimum periods set above for Annual and Project Work Windows, the Port shall make every reasonable effort to minimize the time actually required to complete the work scheduled for a particular Work Window, shall "return" any unused Work Window time to Lessee, and shall give Lessee the longest feasible notice of the availability of unused Work Window time. In addition, the Port may schedule a Work Window only if the parties have attempted unsuccessfully to schedule the work without precluding vessel loading.

NEW ARTICLE 13 - AUTHORITY

The individual executing this Amendment on behalf of Lessee represents and warrants that he is authorized by Lessee to do so.

NEW ARTICLE 14 - DEFINED TERMS

All capitalized terms used but not otherwise defined in this Amendment shall have the same meaning as in the Lease or any of the preceding amendments.

NEW ARTICLE 15 - ENTIRE AGREEMENT

The Lease as previously amended and as amended by this Amendment constitutes the entire agreement between the parties regarding the subject matter hereof and thereof, and supersedes all prior and contemporaneous discussions and agreements, written or oral regarding the same subject. No further amendment to the Lease shall be effective unless in writing and signed by the parties hereto. Both parties agree to be bound by the terms and conditions of this Amendment.

NEW ARTICLE 16 - ASSIGNMENT

For good and valuable consideration the sufficiency of which is acknowledged, KMBT hereby assigns its rights and obligations under the Lease to Lessee and the Port hereby consents to such assignment, as required by section 9.1 of the Lease. The Port's consent to this assignment does not release KMBT from its obligations under the Lease, except to the extent those obligations are performed by Lessee.

NEW ARTICLE 17 - EFFECTIVE DATE

The provisions of this Amendment are effective only with respect to events or matters that occur or arise on or after the effective date of this Amendment.

**KINDER MORGAN BULK TERMINALS, THE PORT OF PORTLAND
INC.**

By: _____

Please print name and title

By: _____
Bill Wyatt, Executive Director

**APPROVED AS TO LEGAL SUFFICIENCY
FOR THE PORT OF PORTLAND**

By: _____
Counsel for Port of Portland

KINDER MORGAN OPERATING L.P. "C"

By: Kinder Morgan G.P., Inc., Its General Partner

By: Kinder Morgan Management, LLC, Its Delegate

By: _____

Name: _____

Title: _____

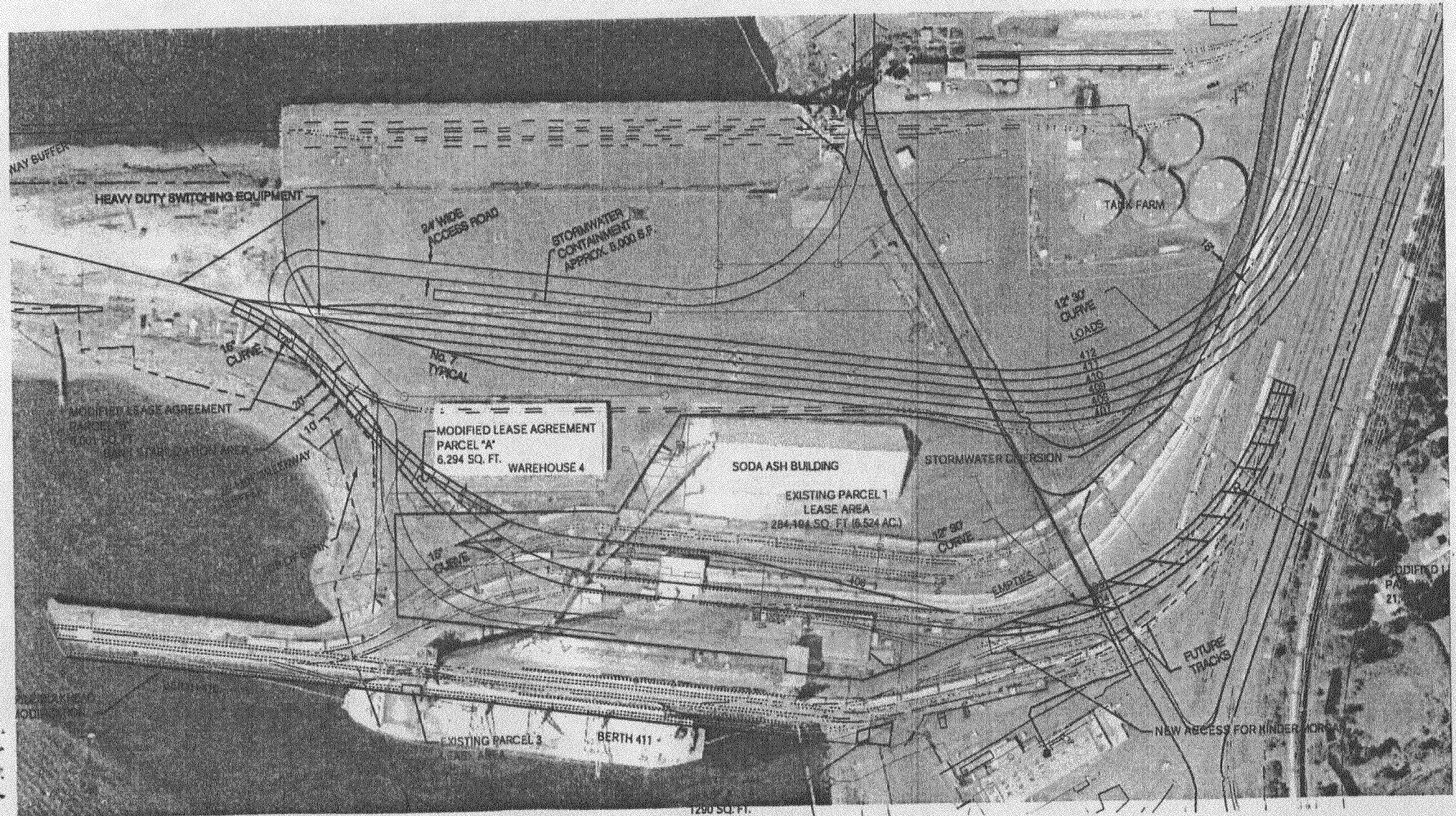
EXHIBITS

- A2 PREMISES AND PREFERENTIAL USE AREA**
- B NEW RAIL IMPROVEMENTS AND DOCK MODIFICATION**
- C REMOVAL ACTION AREA AND UPLAND FACILITY**
- D AST AND UST LOCATION MAP**
- E AST AND UST DESCRIPTION**

RAILROADS OF THE FINAL DESIGN WILL BE USED TO DETERMINE THE
CAPACITY OF TAILTRACK TO ACHIEVE A 4 CAR CUT.

KEY FEATURES INCLUDE:

- TWO ACCESS POINTS FOR CAR TRAFFIC
- HEAVY DUTY RAIL STOP
- HEAVY DUTY SWITCHES IN KEY AREAS, WITH REPAIR ACCESS
- DESIGN FOR EXPANSION
- DESIGN TO CURRENT SAFETY STANDARDS



THE NEW RAILYARD CONFIGURATION, SHEETPILE BULKHEAD DOCK MODIFICATIONS AND LEASE AREAS ARE SHOWN. THE NEW RAILYARD IS CONFIGURED TO CARRY 200 RAILCARS, (MIN) WITH A 83 CARS EMPTY AND A TAILTRACK WITH 3 (MIN) CAR CAPACITY, PLUS 60-75' CLEARANCE TO THE RAILCAR BACKSTOP. FINAL DESIGN WILL SEEK TO MAXIMIZE RAILCAR CAPACITY OF TAILTRACK TO ACHIEVE A 4 CAR CUT.

- TWO ACCESS POINTS FOR CAR TRAFFIC
- HEAVY DUTY RAIL STOP
- HEAVY DUTY SWITCHES IN KEY AREAS, WITH REPAIR ACCESS
- DESIGN FOR EXPANSION
- DESIGN TO CURRENT SAFETY STANDARDS



June 7, 2004



Kevin Jones
Vice President- Regional Manager
Kinder Morgan Bulk Terminals
15550 N. Lombard
Portland, OR 97203

RE: ESCALATION OF T-4 FACILITY LEASE RATES- PORT LEASE #87-109

Dear Mr. Jones:

Per Amendment No. 2 of your lease agreement for outbound bulks at the Port's Marine Terminal No. 4, the following adjustments to the throughput charges are to be made each July 1 based on the change in the CPI-U index over the last year ending December 31. Following are the calculations for this year's increase:

December 2003 CPI	184.30
December 1998 CPI	<u>163.90</u>
Percent Change	12.5%

Soda Ash Throughput rates:

Throughput Rates Effective 7/1/99		Rates Effective 7/1/04	
0 - 500,000 tons	\$.86/ton	0 - 500,000 tons	\$.97/ton
500,001 - 1,500,000 tons	\$.76/ton	500,001 - 1,500,000 tons	\$.86/ton
Over 1,500,000 tons	\$.28/ton	Over 1,500,000 tons	\$.32/ton

All Other Commodities Throughput Charges

Throughput Rates Effective 7/1/99		Throughput Rates Effective 7/1/04	
0 - 500,000 tons	\$.90/ton	0 - 500,000 tons	\$1.01/ton
Over 500,000 tons	\$.77/ton	Over 500,000 tons	\$.87/ton

Minimum Annual Guarantee Rent

Guarantee Effective 7/1/99	Guarantee Effective 7/1/04
\$850,000	\$956,250

Please give me a call if you have any questions. I can be reached at 503-944-7538.

Sincerely,

A handwritten signature in cursive script that reads 'Lorali Sinnen'.

Lorali Sinnen
Marine Contracts Administrator

cc: ~~Brad Clinefelter~~
Mack Brown
POP - Marine Billing



July 6, 2004

Kevin Jones
Vice President, Regional Manager
Kinder Morgan Bulk Terminals
15550 N. Lombard
Portland OR 97203

Re: Lease Agreement #87-109
Amendment No. 6

Dear Jones:

Enclosed is your original copy of the fully executed Amendment No. 6 to the above mentioned Lease at the Port's Marine Terminal 4. The Port is pleased to extend the Lease to allow our discussion to continue regarding the proposed terms of a new lease.

If you have any concerns, you may reach me at 503-944-7538 or Sebastian Degens at 503-944-7214. Thank you.

Sincerely,

Lorali Sinnen
Contract Administrator
Phone: 503-944-7538
Email: sinnel@portptld.com

Cc: Mack Brown, KM
Sebastian Degens, POP

**AMENDMENT NO. 6
TO
TERMINAL LEASE
BETWEEN
KINDER MORGAN BULK TERMINALS, INC. (f/k/a Hall-Buck Marine, Inc.)
AND
THE PORT OF PORTLAND**

This Amendment No. 6 ("Amendment") is executed by the Port of Portland, a port district organized under the laws of the State of Oregon ("Port"), and Kinder Morgan Bulk Terminals, Inc., a Louisiana corporation ("Lessee"), effective as of March 31, 2004.

RECITALS

A. The Port is "Lessor" under a certain terminal lease (Port Agreement No. 87-109, at the Port's Marine Terminal No. 4) with Lessee dated October 30, 1987, as amended by Amendment No. 1 thereto dated November 24, 1993, as further amended by Amendment No. 2 thereto dated July 1, 1999, as further amended by Amendment No. 3 thereto dated July 1, 2003, as further amended by Amendment No. 4 thereto dated December 31, 2003, and as further amended by Amendment No. 5 thereto dated March 31, 2004 (collectively, the "Lease").

B. The Lease term expires June 30, 2004. The parties wish to extend the Lease for an additional three (3) months.

C. During this three-month period, the parties intend to continue to negotiate an amendment to extend the term of the Lease per the letter to Lessee from Lessor dated November 19, 2003. The parties expect the discussions to continue regarding the proposed terms set forth in the November 19 letter.

D. Now, therefore, in consideration of the covenants and promises contained in this Amendment No. 6, the parties agree as follows:

1. OPTION TERM

The Lease term is extended to September 30, 2004.

2. AUTHORITY

The individual executing this Amendment No. 6 on behalf of Lessee represents and warrants that he is authorized by Lessee to do so.

3. DEFINED TERMS

All capitalized terms used but not otherwise defined in this Amendment shall have the same meaning as in the Lease.

4. ENTIRE AGREEMENT

This Amendment represents the entire agreement between the parties and supersedes all prior agreements, written or oral, with respect to an extension of the Lease. No further amendment to the Lease shall be effective unless in writing and signed by the parties hereto. Both parties agree to be bound by the terms and conditions of this Amendment.

**KINDER MORGAN BULK TERMINALS,
INC.**

THE PORT OF PORTLAND

By: Kevin Jones
VP - Regional Manager
Please print name and title

Kinder Morgan Terminals Inc
6/30/04

By: Bill Wyatt
Bill Wyatt, Executive Director

APPROVED AS TO LEGAL SUFFICIENCY
FOR THE PORT

By: [Signature]
Counsel for Port of Portland



June 29, 2004

Gerry Tincher, General Manager, Terminal Operations
Canpotex Shipping Services Ltd.
1111-100 Park Royal South
West Vancouver, BC
CANADA V7T 1A2

Dear Mr. Tincher:

RE: RENT INCREASE - T-5 FACILITY LEASE - PORT LEASE #96-039

According to Section 3.4 of the above mentioned lease, your basic rent and minimum annual basic rent are to be adjusted annually on July 1 based on the increase in the CPI-U for the year ending the previous December. The Port has also agreed to modify the tiered rate structure to eliminate the second tier. Both the rate change and the tier structure change are documented in the attached Amendment No. 5 to Ground Lease. Calculations of these changes are as follows:

CPI-U:

December 2003	184.30
December 2002	180.90
Percentage change	1.9%

Current Rates

Minimum annual basic rent	\$741,798.72
First 1,535,000 MT	\$0.50MT
1,535,001 - 2,000,000	\$0.63MT
Over 2,000,000	\$0.41MT

Effective July 1, 2004

Minimum annual basic rent	\$755,892.90
First 1,535,000 MT	\$0.51 /MT
Over 1,535,000	\$0.42 /MT

Please review the amendment and if acceptable, please execute three original copies and forward them back to me. I will coordinate the signature of the Port and return one original back to you. Your July invoice will reflect these changes. Please call Sebastian Degens at 503-944-7214 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Loral Sinn'.

Loral Sinn, Contracts Administrator

cc: Ted Nieman, Canpotex
Dwayne Dahl, Canpotex
Sebastian Degens, POP
Dan O'Brien, POP Marine Billing
Kevin Jones, Kinder Morgan

PORT OF PORTLAND 121 NW EVERETT PORTLAND OR 97209 • BOX 3529 PORTLAND OR 97208 • 503-944-7000

KMB00000081

**AMENDMENT NO. 5 TO GROUND LEASE
BULK CARGO FACILITY/TERMINAL 5
BETWEEN
THE PORT OF PORTLAND
AND
PORTLAND BULK TERMINALS, L.L.C.**

This AMENDMENT NO. 5 TO GROUND LEASE ("Amendment No. 5") is made and entered into by and between THE PORT OF PORTLAND, a port district of the State of Oregon (the "Port"), and PORTLAND BULK TERMINALS, L.L.C., ("Lessee"), an Oregon limited liability company, organized as an indirect U.S. subsidiary of Canpotex Limited, a Canadian corporation ("Canpotex").

RECITALS

A. The Port and Lessee entered into a ground lease dated March 14, 1996, (Port Agreement No. 96-039) (the "Lease") which was subsequently amended by Amendment No. 1 to Ground Lease dated August 29, 1997, further amended by Amendment No. 2 to Ground Lease dated October 23, 1997, further amended by Amendment No. 3 to Ground Lease dated September 9, 1999, and further amended by Amendment No. 4 to Ground Lease dated May 19, 2003.

B. The Port and Lessee now wish to amend the Lease to modify the tiered volume rent structure.

NOW THEREFORE, the Port and Lessee agree as follows:

1. SECTION 3.2 – BASIC RENT AMOUNT

Section 3.2 shall be deleted in its entirety and replaced by the following:

Basic Rent due hereunder shall be as follows:

Basic Rent charges to Lessee shall be based on the volume in metric tons (1 metric ton ("MT") = 2,204.6 pounds) of Approved Products processed through the Property or the Licensed Area. In no case, however, regardless of volume, shall Basic Rent ever be less than the Minimum Basic Rent of Seven Hundred Fifty Five Thousand Eight Hundred Ninety Two and 90/100 Dollars (\$755,892.90) per fiscal year (subject to CPI adjustment; see below). Basic Rent shall be charged as follows:

For the first 1,535,000 MT or less, Basic Rent shall be calculated at the rate of \$0.51/MT.

Thereafter, for all amounts over 1,535,000 MT, an additional amount shall be added at the rate of \$.42/MT.

All of the above Basic Rent rates and the Minimum Basic Rent shall be adjusted in accordance with Section 3.4.

2. WARRANTY OF AUTHORITY

The individual executing this Amendment No. 5 on behalf of Lessee represents and warrants that he is authorized by Lessee to do so.

3. DEFINED TERMS

All capitalized terms used but not otherwise defined in this Amendment No. 5 shall have the same meaning as in the Lease or any of the preceding amendments.

4. EFFECT OF AMENDMENT

Except as otherwise specified in this Amendment No. 5, all of the terms and conditions of the Lease, as previously amended, shall remain in full force and effect.

5. ENTIRE AGREEMENT

This Amendment No. 5 represents the entire agreement between the parties regarding the Lease, and supersedes all prior and contemporaneous discussions and agreements, written or oral regarding the same subject. No further amendment to the Lease shall be effective unless in writing and signed by the parties hereto. Both parties agree to be bound by the terms and conditions of this Amendment.

This Amendment No. 5 is dated and is effective this 1st day of July, 2004.

LESSEE
PORTLAND BULK TERMINALS, L.L.C.

By: _____

Print Name: _____

As Its: _____

PORT
THE PORT OF PORTLAND

By: _____
Bill Wyatt, Executive Director

APPROVED AS TO LEGAL SUFFICIENCY
FOR THE PORT OF PORTLAND

By: _____
Counsel for Port of Portland

April 24, 2003



Mr. Mack Brown, President
Kinder Morgan Bulk Terminals, Inc.
7116 Hwy 22
Sorrento, LA 70778

Dear Mr. Brown:

It was a pleasure to meet you last week and have the opportunity to discuss options for Kinder Morgan's continued lease of the Terminal 4 bulk facility. As we indicated, the Port of Portland (Port) would like to see Kinder Morgan remain at the Terminal 4 facility or relocate to a new facility (long-term) at Terminal 5. At the same time, there are certain facility constraints that must be addressed to continue operations at Terminal 4 during a transition and prior to finalizing any long-term development plan.

Berth 410, which we call the finger pier, is a wood-constructed dock and was not designed for the types of loads that operate on it daily. The deck on both berths and the rail within the premises and within the terminal require extraordinary maintenance to keep it functional. In addition, the slip adjacent to your two berths will require both maintenance dredging and possibly a more thorough clean-up to meet requirements of a broader project to address historic sediment issues in the Willamette River.

Development opportunities exist at Terminal 5 to add a new berth and mineral bulk facilities capable of handling unit trains. The current long term plan suggests a bulk facility as the best option to fully utilize the site.

As we are quickly approaching the expiration of the existing lease agreement (June 30, 2003), I have enclosed a proposed amendment which extends the current lease agreement for six months to allow time for the negotiations on a new agreement to be conducted.

In light of your agreement to work cooperatively with us to find the best possible long term facility location, with the above issues in mind, the Port would also like to propose the following general terms for your consideration for a new updated lease agreement at Terminal 4:

Term	Approximately 5 years, ending June 30, 2008.
Options	One 5-year option, with terms mutually agreeable to both parties.
Construction	Port to construct new rail yard within expanded premises that would remove the rail operations from the dock. Cost of construction is estimated at \$4.9 million, to be paid within the initial five year term of the lease.

Construction Rent	A temporary additional \$.35/MT for five years, capped at the cost of the rail improvements, to reimburse the Port for the above referenced expenditure.
Premises	Expanded to include the additional rail.
Facility Rent & Escalations	As currently administered.
Maintenance Window	Port will continue to provide routine maintenance of the dock, the deck, and the rail. Kinder Morgan will provide the Port with maintenance windows as needed to perform the maintenance work. Such windows will include no vessel or rail activity, will be of duration sufficient in the Port's judgment to accomplish the proposed maintenance, and may occur several times during a year. Such windows will be scheduled in advance between the parties, but at least within 30 days of a request by either party for the work to be performed.
Maintenance Dredging	The Port will continue to dredge the berth to -40 CRD, contingent upon the ability to obtain necessary permits and construction windows.
Stormwater	The modified rail configuration will require additional connections to Kinder Morgan's stormwater system. The Port will construct drainage for the rail; however, Kinder Morgan will be required to manage the stormwater to meet any permit requirements.
Environmental	Spill contamination and environmental responsibility language will be updated to current lease standards.
Business Interruption	Prior to completion of construction of the rail improvement, the Port's liability for business interruption will be limited to abatement of facility rent. If a dock failure occurs before the new rail is built and the Port determines repair costs are too high, the Port retains the right to suspend the lease, without liability, until the new rail is complete.

This proposal is being sent to you for discussion purposes only, is non-binding, and is not intended to be all inclusive. The proposal is subject to negotiation and execution of contract documents, and will be subject to review and approval by the Port of Portland Commission.

I am convinced that the Port and Kinder Morgan can address the facility issues in a way that meets our mutual concerns and objectives, while assuring that Terminal 4 remains the lowest-cost alternative for handling soda ash on the West Coast in the short run, and that together we can develop responsive and competitive options for continuing to handle this product through Portland in the long-run.

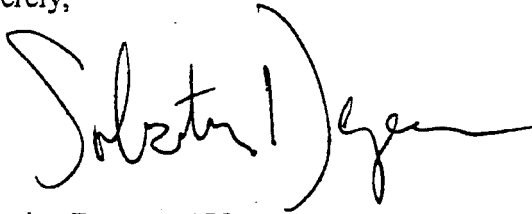
Mack Brown, President

Page 3

April 24, 2003

I look forward to discussions about this proposal, and ask that you call me at your earliest convenience at 503-944-7214 to establish a meeting to begin negotiations.

Sincerely,

A handwritten signature in black ink, appearing to read "Sebastian Degens", with a long horizontal flourish extending to the right.

Sebastian Degens, AICP
Marine Planning & Development Manager

Enclosure

cc: Tom Stanley, Kinder Morgan
Kevin Jones, Kinder Morgan
Bob Hrdlicka, Port of Portland
Carl Warren, Port of Portland

**AMENDMENT NO. 3
TO
TERMINAL LEASE
BETWEEN
HALL-BUCK MARINE AND THE PORT OF PORTLAND**

This Amendment No. 3 (this "Amendment") is executed by the PORT OF PORTLAND, a port district organized under the laws of the State of Oregon (the "Port"), and Kinder Morgan Bulk Terminals, Inc., a Louisiana company ("Lessee"), effective as of July 1, 2003.

RECITALS

A. The Port is Lessor under a lease, as amended, to Hall-Buck Marine, Inc. ("Lessee") dated October 30, 1987, as amended by Amendment No. 1 dated November 24, 1993, and Amendment No. 2 effective July 1, 1999 (the "Lease"), Port Agreement No. 87-109, at the Port's Marine Terminal 4.

B. The parties are negotiating additional terms for the continued operation of the mineral bulk facility at Terminal 4 and require additional time after the end of this lease to continue operation until negotiations are complete.

C. NOW, THEREFORE, in consideration of the covenants and promises contained in this Amendment No. 3, the parties agree as follows:

1. TERM

The term shall be amended such that the Lease shall continue for an additional six months, through December 31, 2003, or until a new agreement is reached, whichever comes first.

2. CONDITION OF DOCK

Lessee acknowledges that the condition of Berth 410 is unknown. If a dock failure occurs and the Port determines repair costs are too high before the new rail can be built, the Port retains the right to suspend the Lease, without liability, until the new rail is complete. The Port shall not be liable to Lessee for any business interruption or loss of revenue due to the condition of the dock or the facility.

3. NO AMENDMENT OF LEASE

Except as expressly set forth herein, nothing in this Amendment No. 3 shall be construed to modify the Lease in any way. Without limiting the generality of the foregoing, this Amendment No. 3 shall not be construed to imply the waiver by the Port of any rights the Port may have to declare a default for any condition now or hereafter existing at the Premises, whether or not known to the Port. This Amendment does not renew or revise the time allowed for Lessee to exercise any Renewal Option to extend the term of this Lease. All such

Renewal Options have passed. The parties are, however, negotiating in good faith to arrive at terms for a possible new lease.

4. DEFINED TERMS

All capitalized terms used but not otherwise defined in this Amendment shall have the same meaning as in the Lease.

5. WARRANTY OF AUTHORITY

The individuals executing this Amendment warrant that they have full authority to execute this Amendment on behalf of the entity for whom they are acting herein.

6. ENTIRE AGREEMENT

This Amendment represents the entire agreement between the parties and supersedes all prior agreements, written or oral, with respect to an extension of the Lease. No further amendment to the Lease shall be effective unless in writing and signed by the parties hereto. Both parties agree to be bound by the terms and conditions of this Amendment.

**KINDER MORGAN BULK
TERMINALS, INC.**

THE PORT OF PORTLAND

By: _____
Title: _____

By: _____
Bill Wyatt, Executive Director

**APPROVED AS TO LEGAL
SUFFICIENCY**

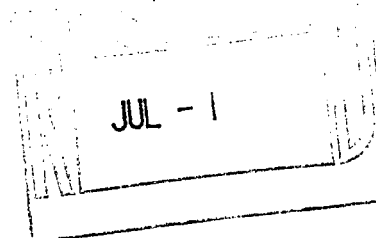
By: _____
Counsel, Port of Portland



Port of Portland

Box 3529, Portland, Oregon 97208, U.S.A.
503/231-5000

June 29, 1999



Tom Stanley, President
Kinder Morgan Bulk Terminals
P.O. Box 625
Sorrento, LA 70778

RE: T-4 Facility Lease - Port Lease #87-109

Dear Tom:

Enclosed, please find a fully executed Amendment No. 2 to the Lease at Terminal 4. This amendment sets the first option period at four years and provides a discount on throughput for soda ash for one year beginning July 1, 1999. Beginning July 1, 2000, the throughput rates for soda ash will revert to the original formula and be escalated accordingly. The following table shows the rates in effect July 1, 1999, per Amendment No. 2 and the rates that would have been effect July 1, 1999, had the original lease escalation formula been applied. This second column will be the starting point for next year's calculations.

Soda Ash Throughput rates:

<u>Effective 7/1/99 - 6/30/00</u>		<u>Effective 7/1/00 Prior to Escalation</u>	
0 - 500,000 tons	\$.75/ton	0 - 500,000 tons	\$.99/ton
500,001 - 1,500,000 tons	\$.64/ton	500,001 - 1,500,000 tons	\$.87/ton
Over 1,500,000 tons	\$.25/ton	Over 1,500,000 tons	\$.32/ton

All other commodities are to be escalated July 1 each year based on the change in the CPI-U index. Calculations are as follows:

December 1998 CPI	163.90
December 1992 CPI	<u>141.90</u>
Percent Change	15.5%

<u>Original Throughput Rates</u>		<u>Throughput Rates Effective 7/1/99</u>	
0 - 500,000 tons	\$.78/ton	0 - 500,000 tons	\$.90/ton
Over 500,000 tons	\$.68/ton	Over 500,000 tons	\$.79/ton

Beginning July 1, 2000, the beginning index for escalation purposes will be December 1998 which is 163.90.

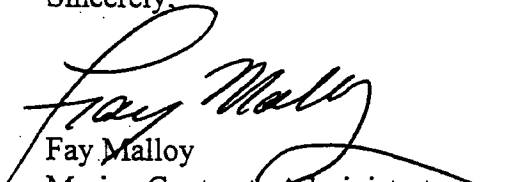
Clark Williams
June 29, 1999
Page 2

The ANSAC surcharge rage of \$0.28/ton has been fully satisfied and will no longer be applied to any cargo.

The Minimum Annual Guarantee was changed from a tonnage calculation to a dollar amount. The Minimum Annual Guarantee Rent for Contract Year 7/1/99 - 6/30/00 is \$850,000, which will be adjusted each July 1 beginning July 1, 2000, by the increase in the CPI-U per Section 3.4.

Please give me a call if you have any questions.

Sincerely,



Fay Malloy
Marine Contracts Administrator

cc: Brad Clinefelter
Kevin Jones
Clarke Williams
Laura Lum

**AMENDMENT NO. 2
TO
TERMINAL LEASE
BETWEEN
HALL-BUCK MARINE AND THE PORT OF PORTLAND**

This Amendment No. 2 (this "Amendment") is executed by the PORT OF PORTLAND, a port district organized under the laws of the State of Oregon (the "Port"), and Kinder Morgan Bulk Terminals, Inc., a Louisiana company ("Lessee"), effective as of July 1, 1999.

RECITALS

A. The Port is Lessor under a lease, as amended, to Hall-Buck Marine, Inc. ("Lessee") dated October 30, 1987, as amended by Amendment No. 1 thereto, ("Amendment No. 1") dated November 24, 1993, (the "Lease"), Port Agreement No. 87-109, at the Port's Marine Terminal 4.

B. Effective July 1, 1998, all the outstanding stock in Lessee was acquired by Kinder Morgan Energy Partners, L.P., and Lessee changed its name to "Kinder Morgan Bulk Terminals, Inc." ("Kinder Morgan") a transaction which the Port acknowledges did not constitute, or result in, a breach or default under the Lease.

C. Kinder Morgan has notified the Port in writing of its intention to take its first five-year option but requests a reduction in term to four (4) years and a reduction in the Throughput Rate for soda ash.

D. NOW, THEREFORE, in consideration of the covenants and promises contained in this Amendment No. 2, the parties agree as follows:

1. ACKNOWLEDGMENT OF CHANGE OF OWNERSHIP

The Port acknowledges that Lessee has changed its name to "Kinder Morgan Bulk Terminals, Inc.", and the continuation of the Lessee's interest in the Lease dated October 30, 1987, between Hall-Buck Marine, Inc., and the Port, Port Agreement No. 87-109.

2. KINDER-MORGAN'S INTERESTS

Kinder-Morgan represents and warrants that it continues to have all of Lessee's right, title and interest in any property or improvements of Lessee located on the Premises.

3. INSURANCE CERTIFICATE

Kinder-Morgan agrees to carry insurance in the amounts and types not less than those required by the Lease to cover all of its activities on the Premises. Kinder-Morgan shall provide to the Port certificates evidencing the required insurance and naming the Port as an additional insured as a prior condition to this Amendment No. 2 being executed by the Port.

4. NO AMENDMENT OF LEASE

Except as expressly set forth herein, nothing in this Amendment No. 2 shall be construed to modify the Lease in any way. Without limiting the generality of the foregoing, this Amendment No. 2 shall

not be construed to imply the waiver by the Port of any rights the Port may have to declare a default for any condition now or hereafter existing at the Premises, whether or not known to the Port.

5. NOTICES

Section 9.12 of the Lease is hereby amended to reflect that notices required or permitted to be given to Lessee under the Lease shall be given to Kinder-Morgan at the following address:

Kinder Morgan Bulk Terminals, Inc.
7116 Hwy. 22
P.O. Box 625
Sorrento, LA 70778-0625

6. OPTION TERM

Section 2.2 - Renewal Options of the Lease, as amended by Amendment No. 1, shall remain in full force and effect except the terms of the option periods shall be amended as follows:

First Option:	July 1, 1999 to June 30, 2003
Second Option:	July 1, 2003 to June 30, 2008
Third Option:	July 1, 2008 to June 30, 2013

7. MINIMUM ANNUAL GUARANTEE RENT

Section 3.2 of the Lease, as amended by Amendment No. 1 is hereby amended and replaced with the following:

Lessee shall pay to the Port annual rent, payable in monthly installments, for each Lease Year for use of the Facility, referred to as the "Basic Rent," which shall be based on the volume of mineral bulk commodities processed through the Facility. In no case, however, regardless of volume, shall Basic Rent ever be less than the annual minimum amount ("Minimum Basic Rent") of \$850,000. The Minimum Basic Rent shall be adjusted annually on July 1 each year beginning July 1, 2000, per Section 3.4 of the Lease, as amended in Amendment No. 1.

8. RENTAL

Section 3.3 of the Lease, as amended by Amendment No. 1, is hereby amended such that Throughput Charges are replaced with the following:

Throughput Charges - Soda Ash

<u>Time Period</u>	<u>Tons Per Year</u>	<u>Throughput Charge/Ton</u>	<u>CPI Adjustment</u>
7/1/99 - 6/30/00	0 - 500,000	\$0.75	N/A
	500,001 - 1,500,000	\$0.64	N/A
	Over 1,500,000	\$0.25	N/A
7/1/00 - Thereafter	0 - 500,000	\$0.86	Per Sec. 3.4 as amended
	500,001 - 1,500,000	\$0.75	Per Sec. 3.4 as amended
	Over 1,500,000	\$0.28	Per Sec. 3.4 as amended

Throughput Charges - All Other Commodities

<u>Time Period</u>	<u>Tons Per Year</u>	<u>Throughput Charge/Ton</u>	<u>CPI Adjustment</u>
7/1/98 - 6/30/99	0 - 500,000	\$0.89	Per Sec. 3.4 as amended
	Over 500,000	\$0.77	Per Sec. 3.4 as amended

9. SODA ASH BULK STORAGE FACILITY CHARGE

The parties acknowledge that the Bulk Storage Facility Surcharge, subject to an annual minimum/maximum guarantee payment of \$385,000, more fully described in Section 3.3(B) of the Lease has been paid in full as of June 30, 1999, such that no further payments pursuant to said Section 3.3(B) or elsewhere in the Lease are due as a Bulk Storage Facility Surcharge.

10. ADJUSTMENT TO THROUGHPUT CHARGES

Section 3.4 of the Lease as amended by Amendment No. 1 is hereby amended as follows:

The "Beginning Index" contained in the first paragraph of Section 3.4 of the Lease and as modified in Amendment No. 1 is hereby changed to December 1998 by changing in Section 3.4 "1992" to "1998."

11. AUTHORITY

The individual executing this Amendment No. 2 on behalf Kinder-Morgan represents and warrants that he is authorized by Kinder-Morgan to do so.

**KINDER MORGAN BULK TERMINALS,
INC.**

By: Thomas B. Stanley
Title: President

THE PORT OF PORTLAND

By: Mike Thorne
Mike Thorne, Executive Director

APPROVED AS TO LEGAL SUFFICIENCY

By: V. J. S. S. S.
Counsel, Port of Portland

June 3, 2010

NOTICE TO PORT OF PORTLAND TARIFF USERS

RE: REVISIONS TO PORT TARIFF NO. 8 - EFFECTIVE JULY 1, 2010



**Marine and Industrial
Development**

7200 NE Airport Way Portland OR 97218

Box 3529 Portland OR 97208

T 503.415.6000 F 503.548.5758

The electronic form of the Marine Tariff will govern in the event of any conflict with any paper form of the Marine Tariff or this notice. Please note that other tariff items will be adjusted effective July 1, 2010, upon receipt of Ports America labor increases.

➤ **Section I - Fresh Water Service**

The following item has increased from \$2.44 to \$2.73 per 100 cubic feet:
1000.002 Water Consumption

➤ **Section I - Fendering System or Piling Damage Repairs**

The following items have increased as noted:

- 1095.061 - Wooden Pilings
From \$1,932 to \$2,100
- 1095.062 - Chocks and Whales
From \$105 to \$175
- 1095.063 - Sleeved Steel Piling
From \$5,859 to \$6,200

➤ **Section II - Dockage Rates - Facilities**

The following items have increased approximately 2.2%:

- 2100.150 - 2215.150 -- Dockage Regular
- 2100.151 - 2215.151 -- Lay Charge

➤ **Section II - Dockage Rules and Rates - Grain Elevators**

The following items have been removed from the tariff:

- 2300.150 - 2415.150 -- Grain Elevators Dockage Regular
- 2300.151 - 2415.151 -- Grain Elevators Lay Charge

and replaced with:

- 2500.010 - Grain Elevators Dockage
For Grain Elevators only dockage will be assessed at \$0.49 per GRT (gross registered tonnage) for each 24-hour period or fraction thereof.
Further details regarding Grain Elevator Rules have been added as provided in Section 2 of Dockage Rules.

➤ **Section III - Breakbulk Rates**

The following items have increased approximately 2.2%:

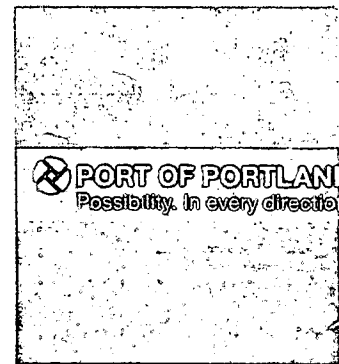
- 3050.251 - 3050.252 -- Liquid Bulks - Wharfage (direct transfer and overside)
- 3300.251 - 3300.252 -- Cargo NOS - Wharfage (direct transfer and overside)

➤ **Section IV - Container Cargo Rates**

The following items have increased approximately 8%:

- 4000.500 - 4850.020 - All container cargo items

Mission: To enhance the region's economy and quality of life by providing efficient cargo and air passenger access to national and global markets.



May 26, 2010

Kinder Morgan Bulk Terminals, Inc.
Attn: Marco Ullmer, General Manager
101 E. 8th Street, Suite 260
Vancouver, WA 98660

RE: ANNUAL ESCALATION OF T-4 LEASE RATES

In accordance with your T-4 Facility Lease Agreement 1987-109 with the Port of Portland, lease rates shall adjust upward by 1.5% each July 1. Pursuant to section 3.2 of the lease, the following adjustment to rent is effective July 1, 2010:

	<u>Annual Rent</u>	<u>Monthly Rent</u>
Existing Rent	\$1,344,217.08	\$112,018.09
1.5% Increase	<u>\$20,163.26</u>	<u>\$1,680.27</u>
New Rent	<u>\$1,364,380.34</u>	<u>\$113,698.36</u>

If you have any questions concerning this matter, please feel free to contact me at 503.415.6243 or at camilla.sparks@portofportland.com.

Thank you,

Camilla Sparks
Contracts Administrator
Financial Services
Port of Portland

cc: Bruce Craven, Kinder Morgan Bulk Terminals - Portland
Debra Crawford
Jeff Krug
Finance Correspondence File

Minutes

Kinder Morgan

3/31/09

9:30 AM

T4 Kinder Morgan offices

Meeting called by: Jeff Krug (Port)

Type of meeting: Review Lease Terms

Attendees: Jeff, Krug, Debra Crawford, David Breen (Port)
Marco Ullmer, Bruce Craven, Jeff Bean (Kinder Morgan)

Agenda

Lease Exhibit (Review of Updated Exhibit A2)

Environmental-Audit update; Port 104e response timeline; KM updates

Infrastructure Projects-Fender Pile (Port); Bulk loader study (KM); Dock resurface (KM)

Rail Service-Escort Program; Service review

Security-TWIC (preferred vendor list); Locks/Keys

Business Outlook-KM; Port

Meeting commenced at 9:40 am – all present

Discussion of follow up items from October 2, 2008 meeting: KM has received copy of entire lease, Bruce sent Lorali existing rail numbering map, Port lock change out has been completed, definition of terms for dock apron, yard area, new rail improvement is completed, completion of Phase 1 ESA replacement Exhibit A-2 is in process.

David Breen discussed the Remedial Investigation (RI). The approximately 80 initial areas of concern (AOC) for Terminal 4 have been investigated through the RI and almost all have been put to rest (all but approximately 3) as part of that investigation. The Terminal 4 AOCs resolved by the RI included several within or near the KM leasehold. These included 1) underground storage tank – removed and replaced by the dumper building, and 2) metals around the RR line area where lead was detected by the tracks. It was prudent to incorporate the findings of the RI into the draft KM audit baseline report.

The draft report will also be updated with information provided BY the Port to EPA as part of the Port's 104(e) response for Terminal 4 which is due to EPA on April 30. The ESA will be updated with the 104(e) information and a draft will be submitted to KM for review.

Follow Up : David will send to Brent McMullin at KM a copy of the Port's report, with copy to Bruce, Marco and Jeff a approximately one week after Port sends in the report.

Replacement Exhibit A2 was reviewed by group present. KM needs to have locomotive repair area included and identified. Used to jack up locomotives to replace trucks as needed, which is now done over gravel area. David indicated there should be no drainage of liquids unless over paved area with containment, need BMP for use of the area, and suggested KM provide hand drawn sketch of where work area is to be located.

Follow Up: KM to discuss and provide location to Port once replacement Exhibit A2 is completed. Port to provide hard copy and electronic copy of final Exhibit A2.

KM Updates:

1) Sealing dock to preclude leak through was successful, KM may seal more area in 2009.

2) KM had high zinc result on a storm water blip a month ago on outfall 101. They retested and level was acceptable. Source suspected was roof, but otherwise unknown and KM has not previously had such a result. David to check on if we test storm water for zinc – per request from Marco.

3) Under dock cleanup was completed in August 2008, working well and KM will continue as needed.

Port Updates:

1) Per Jeff, fender pile project is no go until maybe 2010 due to economic conditions. Asked KM to keep on with ships to be careful; split piles are not broken but continued care is needed.

2) No women's bathroom yet. Will keep this project on the list as capital allows, estimate is \$25K.

3) KM is looking at updates on bulk loader,. KM engineering study of structure and mechanical systems, and unique ship loader attributes, where it is from a safety and useful life condition. KM will do this month (April) and look at footings of marine tower and strengthen through bolts. Study doesn't include dust control.

4) Per David Breen, DEQ completed diesel emission study on air quality impacts and improvements. Gave Brent contact of SLR for emissions info. Nothing air quality related has been noted for KM at Terminal 4. General recommendations would include ultra low sulfur diesel for locomotives, (KM believed to be using low sulfur, will check on what's actually being used) and non-idle, shut locomotives down when not in use.

5) Best Management Practice – update stormwater pollution control plan so it reflects provisions from DEQ.

6) Projects – building clean up finalizing and engineers to determine what's needed for building. Dates for inspection 4/2 and 4/3.

Rail service escort program/Security. Jeff noted KM concern about inconsistency on calling KM to provide escort with notice. Preferred vendor list – KM to give to Port security a preferred vendor list. RR is not authorized to come on T-4 without guard escort with TWIC. Phone system not reliable or guards are tied up with gate traffic. KM to push issues and action needed with Bill McCormack.

Business outlook:

KM – Average volumes over next 3 months March @ 140 K, April @ 100K, May 100K.

Port – Reduced capital projects, staff reductions/furlough until economy improves.

Other Business Issues:

- KM said someone is moving blocks near the pipe gate access in back of their facility, and they have seen tire tracks through gravel area. They have blocked the access and resolved the issue. Pipe gate is now fixed.
- Electricity and billing issues have been resolved.
- ILWU- rail coordinator, KM hasn't heard from union. JAPC meeting on 4/1, Greg Beiber to attend.

Meeting adjourned at 11:15 am.

Follow up (what/by whom):

Daivd B. - After 4/30/09, send copy of Port's 104E report to Brent McMullin at KM, with copy to Bruce, Marco and Jeff.

Port/KM – Port to complete Phase 1 ESA by June 1, 2009 for KM review/comment.

Jeff – Send acknowledgement letter for ship loader (Lease Amend 7, Sec. 4.17) to Marco, along with revised Exhibit A2 hard copies.

Debra – Coordinate completion of Exhibit A2, including addition of RR track numbers. Send KM hard and electronic copies of replacement Exhibit A2.

Bruce – Will send track numbers to Debra to use if needed. Port survey may already have.

Minutes

Kinder Morgan

10/2/2008

1:30 PM

T4 Kinder Morgan offices

Meeting called by: Jeff Krug (Port)
Type of meeting: Review Lease Terms

Attendees: Jeff, Krug, Lorali Sinnen, David Breen (Port)
Bruce Craven, Marco Ullmer (Kinder Morgan)

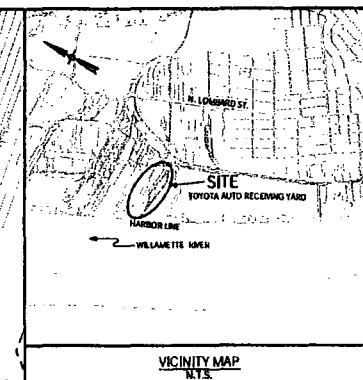
Agenda

Review of Lease Agreement and Party Responsibilities/Obligations
Fender Pile Discussion
Dock resurfacing Discussion
Review of coming year T4 activities
Other Items

Meeting commenced at 1:30 pm – all present

Meeting adjourned at ___ pm.

To Come:
POP map of Lease Area
NEW RAIL #5 (Rot to Port)
REMOVE TRACKS NOT IN EXISTENCE




①
C-1

LEGEND
 BASIN BOUNDARY
 LEASE BOUNDARY

DRAINAGE BASINS		
BASIN ID	SQ FT	ACRES
K	182,000	4.2
L	668,000	18.3

[illegible]

70010044	1965
SECURITY INDEX	PERIOD INDEX

DESIGNED BY B. DEGENS
 DRAWN BY P. REYNOLDS
 CHECKED BY B. ANDERSON
 DATE APR 2007
 GRAPHICAL SCALE BAR 

KINDER MORGAN DRAINAGE BASINS
PLAN VIEW

SUBMITTED BY R. ANDERSON
FIELD OF STUDY PHIL. OF EDUCATION

TYPE	DRAWING NO.		
PD	T4 2007-1	1/1	(C-1)

EXHIBIT "A"

Drawing No. T4-87-11 1/1 (EP)

(Behind Original Contract)

EXHIBIT "B"

Drawing No. C-1 Rev. 1

Code - 5044-002

(Behind Original Contract)

TERMINAL LEASE
BETWEEN
THE PORT OF PORTLAND
AND
HALL-BUCK MARINE INC.

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TERMINAL USE AND DEVELOPMENT LEASE

THIS TERMINAL USE AND DEVELOPMENT LEASE, dated October 30, 1987, by and between THE PORT OF PORTLAND, a municipal corporation of the state of Oregon, hereinafter referred to as "Port," and HALL-BUCK MARINE, INC., hereinafter referred to as "Hall-Buck," a corporation organized under the laws of the state of Louisiana,

W I T N E S S E T H:

Am del Article 1

ARTICLE I - PREMISES

Section 1.1 - Description: Port leases to Hall-Buck, on the terms and conditions stated below, the premises at Terminal 4 consisting of approximately one acre of a paved area adjacent to Berths 410 and 411 as shown in Exhibit A, attached hereto and made a part hereof, including rails, associated buildings, and utilities, and hereinafter referred to as "Premises."

Section 1.2 - Preferential Use: Hall-Buck shall have the preferential use of the wharves, rail tracks and aprons at Berths 410 and 411, Terminal 4, as shown in Exhibit A, for the export of commodities under the terms and conditions of this Terminal Lease.

Section 1.3 - Railcar Storage: Although tracks outside of the Premises are not preferentially assigned, the Port will make trackage available to Hall-Buck to store up to 200 railcars necessary for Hall-Buck's operation. Said storage area may include both leased and non-leased area.

*in this regard
to remove
you of part
the*

Section 1.4 - Port's Secondary Use: The Port reserves the right to the use of the wharves, rail tracks and aprons at Berths 410 and 411 upon notice to Hall-Buck when there is no ship at berth being served by Hall-Buck. The Port also retains the right to the use of the Dravo bulk outloader and the Whirley crane presently located on the Premises. Both parties to this Terminal Lease shall keep these Premises clear of cargo and gear when not loading or discharging vessels so as not to interfere with the operations of the other.

The Port, its employees, agents and contractors shall have access to and use of lunchroom, toilet facilities and supercargo office on the Premises.

The Port and vessel stevedores authorized by the Port and their employees, agents, and contractors shall have access across the Premises when needed for their operations at Berths 410 and 411.

Port and Hall-Buck agree to provide a minimum of seven days' written notice to the other party of any potential conflicting uses on the Premises.

Section 1.5 - Use of Premises: Hall-Buck shall use the Premises only for the following purpose: Construction and operation of a facility for the export of soda ash and compatible mineral bulk products. Other commodities may be shipped only with written approval by the Port.

Hall-Buck shall provide the parking space for the vehicles of Hall-Buck employees and its contractors, including but not limited to the ILWU work force, agents and invitees within the Premises.

Section added per Amendment #1 Article 2

Section 1.6 - Good Faith: The terms and conditions set forth in this Agreement are for the mutual benefit of both parties. Because of the nature of this Agreement, the parties agree that there is an obligation and implied duty of reasonable diligence and good faith imposed on both parties to make reasonable efforts to fulfill the terms, conditions, and covenants imposed by this Agreement. In the event of any disagreement between the parties, the Port and Hall-Buck shall attempt to resolve the disagreement by good faith negotiations.

ARTICLE II - TERM

Section 2.1 - Term: The term of this Terminal Lease shall commence on the Date of Execution of the Agreement and shall continue for a period of five years from the first day of the month following substantial completion as defined in Section 4.2.

Amendment #1 extend lease term thru 6/3/99 Article 3

Section 2.2 - Renewal Options: If Hall-Buck is not then in default, Hall-Buck shall have two options to renew this Terminal Lease on the same terms and conditions except for the establishment of rentals as herein provided. Each option shall be for a period of five years and shall be exercised in writing given to the Port not less than one hundred and eighty days prior to the last day of the expiring term.

Amended #1 article 3

~~Section 2.3 - Third Option: If Hall-Buck is not then in default at the end of the second five-year option, and provided that the Port continues to designate the Premises for the export of bulk mineral products, Hall-Buck shall have the option to renew this Terminal Lease Agreement for a period of time which is mutually agreeable to both parties, not to exceed ten years (hereinafter referred to as "third option"). The renewal of this Terminal Lease Agreement shall be on the same terms and conditions except for the establishment of rentals, which shall be adjusted in accordance with Paragraphs 3.4 and 3.5, and the minimum annual guarantee rent shall be based on 600,000 tons per year.~~

~~Notwithstanding any other provision contained herein, if the Port decides, in its sole discretion, during the third option, to use the Premises for some use other than the export of bulk mineral products, the Port shall have the right to terminate this agreement for its convenience by giving Hall-Buck one year's written notice.~~

The Port shall give Hall-Buck notice of its intentions with regard to the facility fifteen months prior to the end of the second five-year option period. If the Port elects to continue the facility as a bulk terminal, the parties shall immediately begin negotiations on a new renewal term with the intent that the term will be finalized not less than twelve months prior to the expiration of the second five-year option period.

Deleted per Amendment #1 Article 3

ARTICLE III - RENTAL

Section 3.1 - Rent Prior to Substantial Completion: During the period prior to substantial completion of the Facility, or until the end of the ninth month after the Date of Execution of this Lease, whichever comes first, Hall-Buck shall pay the Port a Basic Rent equal to \$700 per month.

Section 3.2 - Minimum Annual Guarantee Rent: For the first one-year period, commencing with the first of the month following substantial completion of construction of the Facility as determined in Section 4.2 or the end of the ninth month after the Date of Execution of this Lease, whichever comes first, Hall-Buck shall pay the Port a Minimum Annual Guarantee Rent ("Minimum Guarantee") equal to \$325,000, said Minimum Annual Guarantee Rent established on the basis of the Basic Throughput Charge as described in Section 3.3.

Deleted per Amendment #1 Article 4

*Replaced by changes in Amendment 4/
Article 5*

Section 3.3 - Throughput Charges:

~~A. Hall-Buck shall pay the Port a Basic Throughput Charge, which shall be defined as the rate charged per ton on the first 500,000 tons of soda ash or other mineral bulk commodity loaded on vessel per year, and an Excess Throughput Charge, which shall be defined as the rate charged per ton on the excess over 500,000 tons of soda ash or other mineral bulk commodity loaded on vessel per year, for all soda ash and other mineral bulk commodities loaded on vessels by Hall-Buck at Terminal 4 in accordance with the following scale:~~

<u>Tons Per Lease Year</u>	<u>Payment Per Ton</u>
Basic Throughput Charge: (the first 500,000 tons)	\$0.65 per ton ^{\$} 325,000
Excess Throughput Charge: (over 500,000 tons)	^{Based on 1.2 ton} \$0.55 per ton ^{\$} 385,000

~~Tonnage shall be calculated on an annual basis. The term "ton" shall mean a standard metric ton of 2,204 pounds.~~

~~B. For any vessels loaded by Hall-Buck between the date of substantial completion and the first of the month following substantial completion, Hall-Buck shall pay the Port the Basic Throughput Charge.~~

~~C. Hall-Buck shall keep true and accurate accounts, records, books and data, including but not limited to vessel arrival and departure data, which shall show all tonnage handled by Hall-Buck at the Premises. The Port and its agents shall have the right at all~~

reasonable times to inspect and audit such books, records, agreements, Oregon income tax returns, and other data relating to throughput charges or Minimum Annual Guarantee rental charges as may be required in the judgment of the Port or its auditors to confirm all items necessary for the computation of the rental payments provided for under this Agreement.

Amendment No. 1
Handwritten

Section 3.4 - Adjustment to Throughput Charges: ~~The Basic~~

~~Throughput Charge and the Excess Throughput Charge shall be subject to adjustment at one-year intervals ("Adjustment Lease Years") as follows:~~

Adjusted to
CP1-12

A. The consumer price index for all urban customers (base year 1967 = 100) for the United States, published by the United States Department of Labor, Bureau of Labor Statistics ("Index") which is published in December of the year preceding the adjustment lease year ("Adjustment Index"), shall be compared with the index published in December ^{1992 Amendment #1} ~~1987~~ ("Beginning Index"). *Article 6*

B. If the Adjustment Index has increased over the Beginning Index, the throughput charge payable commencing in each adjustment lease year (until the next adjustment lease year) shall be set by multiplying the throughput charge set forth in Subsection 3.3(A) by a fraction, the numerator of which is the Adjustment Index and the denominator of which is the Beginning Index; provided, however, that the Basic Throughput Charge shall never be less than the rate of \$0.65 per ton and the Excess Throughput Charge shall never be less than the rate of \$0.55 per ton.

C. If the index is changed so that the base year differs from that in effect when the term commences, the Index shall be converted in accordance with the conversion factor published by the United States Department of Labor Statistics. If the Index is discontinued or revised during the term, such other government index or computation with which it is replaced shall be used in order to obtain substantially the same result as would be obtained if the index had not been discontinued or revised.

Deleted per Article 6

Section 3.5 - Adjustment to the Minimum Annual Guarantee Rent:

~~The Minimum Annual Guarantee shall be subject to adjustment at one-year intervals by multiplying the adjusted Basic Throughput Charge as computed in Section 3.4 by 500,000 tons, provided, however, that the Minimum Annual Guarantee shall never be less than the \$325,000 per year.~~

Section 3.6 - Adjustment of Minimum Annual Guarantee Upon

Renewal: It is understood by both parties that Hall-Buck's Minimum Annual Guarantee to the Port is based on tonnage commitments made to Hall-Buck by the American Natural Soda Ash Corporation (ANSAC), and that at the end of the initial five-year term of this Lease, ANSAC may or may not renew its tonnage commitments to Hall-Buck at the 500,000-ton level. If ANSAC does not renew its tonnage commitments to Hall-Buck at the 500,000-ton level of tonnage, at the time of renewal of this Lease for the first five-year option, Hall-Buck's Minimum Annual Guarantee to the Port shall be adjusted to equal the annual

~~volume of tonnage guaranteed by ANSAC, companies previously affiliated with ANSAC, and companies shipping similar mineral bulk commodities through Hall-Buck multiplied by the adjusted Basic Throughput Charge, but in no event shall Minimum Annual Guarantee be less than 300,000 tons per year times the adjusted Basic Throughput Charge.~~

Section 3.7 - Terminal Tariff Dockage Charges: The Port and Hall-Buck agree that during the Agreement term and any extensions thereof, the Port reserves the exclusive right to determine the rate for dockage charges on all vessels berthing at Terminal 4 in accordance with the Port of Portland published tariff in effect at the time of berthing. All published tariff rates applicable to Terminal 4, including any published discounts shall at all times be competitive with rates in effect by the Port at its other facilities, whether or not such facilities are operated by the Port.

Section 3.8 - Time and Place of Payments:

18 days payment to Port
A. Hall-Buck shall pay to the Port on or before the fifteenth day of each calendar month the throughput charges provided in Section 3.3 for the immediately preceding calendar month, such payment to be accompanied by a statement in such reasonable detail as required by the Port. Within thirty days after the anniversary date of this Lease, Hall-Buck shall pay to the Port any deficiency between monthly throughput charges theretofore paid and the minimum guaranteed throughput charges required by the Lease pursuant to Section 3.2, as adjusted pursuant to Sections 3.4, 3.5, and 3.6.

B. Hall-Buck shall perform the billing and collection of their marine terminal facility and service rates and charges, such as storage, throughput charge, and truck and rail loading and unloading, when they perform marine terminal services at the Premises.

C. Payments shall be accompanied by a written report of vessel activity and tonnage by shipper and by commodity.

D. Payment shall be to Port at The Port of Portland, Post Office Box 3529, Portland, Oregon 97208, or such other place as Port may designate. All amounts not paid by Hall-Buck when due shall bear interest at the rate of 18% per annum. The interest rate of 18% on overdue accounts is subject to periodic adjustment to reflect the Port's then current interest rate charged on overdue accounts.

ARTICLE IV - HALL-BUCK OBLIGATIONS

Section 4.1 - Construction of Facility:

A. Hall-Buck shall construct, or cause to be constructed, a dry bulk export facility (Facility) upon the Premises to unload soda ash and other compatible mineral bulk commodities, by rail and load vessels berthed at a dock located upon the Premises consistent with Exhibit B and future changes as approved by the Port in writing. The Facility shall have a designed capacity to transfer soda ash from rail to ship of at least 1,500 tons per hour.

B. Prior to any planned construction, alteration, or changes upon the Premises, Hall-Buck shall submit to Port final plans and specifications, site-use plan, and architectural rendering thereof and shall not commence any construction until it has received Port's written approval. All plans for construction, alteration, or changes to the Facility or any other modifications to the Premises during the term of this Lease shall be prepared and signed by an architect or engineer registered in the State of Oregon. All landscape plans, to the extent they are required to landscape pursuant to city code, shall be prepared and signed by a landscape architect registered in the State of Oregon. Should Port fail to take action concerning plans and/or specifications submitted to it within forty-five days, said plans and/or specifications shall be deemed approved.

Hall-Buck shall, as a condition of this Lease, invest or cause to be invested directly in the improvements to be made upon the demised Premises under this Lease not less than 90% of the cost estimates as set forth in the attached Exhibit C made by Hall-Buck for the design, engineering, construction, equipping, furnishing, and landscaping of the Premises in a manner so specified in such Exhibit B.

C. Hall-Buck shall be responsible for obtaining all necessary local building permits and authorizations prior to operation of the Facility.

D. Hall-Buck shall begin construction of the Facility no later than one month after the Date of Execution of this Lease, and shall substantially complete construction and begin operating the Facility within nine months from the start of construction. At the time of execution of this Terminal Lease, Hall-Buck shall execute and deliver to the Port a 100% performance and payment bond, insuring construction and completion of the improvements contemplated herein and payment of all contractors and subcontractors, and jointly and severally binding and holding Hall-Buck and a surety authorized to transact business in the State of Oregon to the Port and guaranteeing the faithful performance of Hall-Buck's obligation to construct and complete the improvements required by this agreement's construction requirements.

E. In compliance with Section 4.1(D), Fidelity & Deposit Company of Maryland ("Bonding Company") has agreed to issue a 100% Performance and Payment Bond for the construction of the Facility in the sum of \$4,300,000. The Bonding Company requested that a separate Construction Contract be developed between Hall-Buck and the Port for the purpose of clearly specifying the construction obligations of Hall-Buck and clearly indicating that the Bonding Company's Performance and Payment Bond insures completion of the improvements contemplated herein and the payment of all contractors and subcontractors but does not extend to all obligations of Hall-Buck under this Terminal Lease. The Construction Contract outlining Hall-Buck's construction obligations under this Terminal Lease is marked Exhibit D, the provisions of which are fully incorporated by reference

herein. To the extent that any terms, conditions, and requirements of the Construction Contract conflict with the terms of this Terminal Lease Agreement, the Terminal Lease Agreement shall prevail.

F. added paragraph See Amendment #1 Article 7

Section 4.2 - Substantial Completion: When Hall-Buck considers the Facility to be substantially complete, Hall-Buck shall submit to the Port a written notice of substantial completion. The Port shall then make such inspection or review as necessary to determine that the Facility is acceptable, constructed in accordance with the terms and conditions of this Lease, and ready for use and occupancy. Substantial completion of construction shall mean that construction has progressed to the point where, in the written opinion of both the Port and Hall-Buck, said written opinion to be signed by both parties prior to any ship loading, the Facility is sufficiently complete and is available for commercial loading of bulk commodities.

Section 4.3 - Joint Inspection: Before construction starts on the Facility, representatives of Hall-Buck and the Port shall inspect the wharves, aprons, utility station, buildings, and all other improvements on the Premises and at Berths 410 and 411. At the time of this inspection, both parties shall agree in writing as to the condition of the existing improvements.

Section 4.4 - Conduct of Business: Hall-Buck agrees once construction under Section 4.2 is completed to continuously during the term of the Lease conduct and carry on its soda ash and other approved

bulk export business on the leased Premises and shall keep such Premises open for business and cause such business to be conducted therein each and every business day generally observed by like businesses, except for acts of God, labor disputes, or other causes beyond Hall-Buck's reasonable control.

If the ILWU imposes a dust penalty charge or stops work at any other operation at Terminal 4 because of dust from a ship being loaded by Hall-Buck, Hall-Buck shall be responsible for any reasonable extra charges incurred.

*What about dust from other operations
causing Hall-Buck to stop operation due to termination?*

Section 4.5 - Title to Improvements: Upon termination of this Terminal Lease by the passage of time or otherwise, the Port shall have the option to either require removal of the Facility and all structures, installations, or improvements installed by Hall-Buck except rail tracks within one hundred twenty days after the termination of the Terminal Lease at Hall-Buck's expense or shall have the option to take title to the Facility including any structures, installations, and improvements, including the rail tracks pursuant to Article VIII.

Section 4.6 - Maintenance:

Amended per #1 Article 8

A. Hall-Buck shall at its own expense keep and maintain the leased Premises, the Facility, and all improvements of any kind, which may be erected, installed or made thereon by Hall-Buck, and any rail tracks, pavement, or buildings within the lease area, in good and substantial repair and condition, including the exterior condition

thereof, and shall make all necessary repairs and alterations thereto. Hall-Buck shall provide proper containers for trash and garbage and shall keep the Facility and Premises free and clear of rubbish, debris, and litter at all times. Port shall at all times during ordinary business hours have the right to enter upon and inspect the Facility and Premises. Port shall give Hall-Buck prior notice of any inspections.

B. Hall-Buck shall be responsible for payment of all costs due to damage to Port property associated with its operation of the Facility, including damage from derailment when Hall-Buck is operating switching equipment. For any ship damage to the wharves not proximately caused by the negligence of Hall-Buck, the Port shall bear the cost of investigating, compromising, or litigating the claim. Hall-Buck shall be required to immediately notify the Port of any ship damage to the wharves. ~~Question, as a person I will not be notified.~~

Section 4.7 - Compliance with Permits and Standards: Hall-Buck shall comply with the requirements of all permits obtained by the Port or Hall-Buck from the Oregon Department of Environmental Quality, State Land Board, U.S. Army Corps of Engineers, and all requirements of other federal agencies and local jurisdictions. Hall-Buck shall pay any fines or penalties which may be rendered for violation of such permits.

Amended Article 9

Section 4.8 - Utilities: Hall-Buck shall promptly pay any charges for sewer, water, gas, electricity, telephone, and all other charges for utilities which may be furnished to the Facility and leased Premises, including the installation of metering devices necessary to meter the utilities. Hall-Buck shall be responsible for any additional costs necessary to bring the utilities to the Facility or Premises.

Article 10

Section 4.9 - Liens: Hall-Buck agrees to pay, when due, all sums of money that may become due for, or purporting to be for, any labor, services, materials, supplies, utilities, furnishings, machinery, or equipment which have been furnished or ordered with Hall-Buck's consent to be furnished to or for Hall-Buck in, upon, or about the Facility and Premises herein leased, which may be secured by any mechanics', materialsmen's, or other lien against the Premises herein leased or Port's interest therein, and will cause each such lien to be fully discharged and released at the time the performance of any obligation secured by any such lien matures or becomes due, provided that Hall-Buck may in good faith contest any mechanics' or other liens filed or established, and in such event may permit the items so contested to remain undischarged and unsatisfied during the period of such contest.

Article 11

Section 4.10 - Taxes: Hall-Buck agrees to pay all lawful taxes and assessments which during the term hereof or any extension may become a lien or which may be levied by the state, county, city, or

any other tax-levying body upon the Facility, the Premises or upon any taxable interest by Hall-Buck acquired in this Terminal Lease or any taxable possessory right which Hall-Buck may have in or to the Premises or facilities hereby leased or the improvements thereon by reason of its occupancy thereof as well as all taxes on all taxable property, real or personal, owned by Hall-Buck in or about said premises. Upon making such payments, Hall-Buck shall give to the Port a copy of the receipts and vouchers showing such payment. Upon any termination of tenancy, all taxes then levied or then a lien on any of said property or taxable interest therein shall be paid in full without proration by Hall-Buck forthwith or as soon as a statement thereof has been issued by the tax collector.

Section 4.11 - Operating Program: On or before July 1 of each calendar year, the parties shall meet and discuss Hall-Buck's operating plan for the ensuing twelve-month period which discussion shall include, among other things, the sharing of Hall-Buck's program for marketing, method of relationship with community groups, regulatory agencies, and other interested groups.

Section 4.12 added Article 12
" 4.13 ARTICLE V - PORT OBLIGATIONS 13
" 4.14 " " 14

*AMENDED
#1 79 7-7*

Section 5.1 - Port's Warranty: The Port warrants that it is the owner of the leased Premises and has the right to lease them free of all encumbrances. The Port further warrants that it has no actual knowledge of any latent defects or unsound physical conditions on the Premises. The Port will upgrade the rail trackage and roads serving

Deck?

Terminal 4 and will defend Hall-Buck's right to quiet enjoyment of the leased Premises from the lawful claims of all persons during the lease term.

Section 5.2 - Dredging: The Port will dredge and maintain a 40-foot depth Columbia River Datum at Berths 410 and 411.

Section 5.3 - Additional Permits: The Port will cooperate with Hall-Buck in the obtaining by Hall-Buck of any permits (in addition to those set forth in Section 4.7) required by government agencies for the construction, operation, maintenance, and expansion of the Facility.

Amended Article 15

Section 5.4 - Maintenance: The Port shall have the obligation to maintain the wharves and aprons at Berth 410 and 411 and the rail and roads outside the lease area serving the Premises in good operating condition and in good repair.

The Port shall be responsible for damages to the Facility and the Premises due to other ships being worked by the Port or its stevedores separate from ships handled by Hall-Buck.

Once the Facility is operational, the Port may conduct periodic preventative maintenance inspections including underdock inspection before and after arrivals of ships being served by the Port or its stevedores. Hall-Buck may accompany the Port representative on any and all inspections.

Amended Article 16

ARTICLE VI - INDEMNITY AND INSURANCE

Section 6.1 - Indemnity: Hall-Buck agrees fully to indemnify, save harmless, and defend the Port, its commissioners, officers and employees from and against all claims and actions and all expenses incidental to the investigation and defense thereof, including but not limited to those claims or actions, based upon or arising out of damages or injuries to third persons or their property, caused by the fault or negligence in whole or in part of Hall-Buck, its subtenants, or employees in the use or occupancy of the Facility or the Premises hereby leased; provided that the Port shall give to Hall-Buck prompt and reasonable notice of any such claims or actions, and Hall-Buck shall have the right to investigate, compromise, and defend same, provided such claim is not the result of negligent act of the Port.

Subject to the limitations of the Oregon Tort Claim Act, ORS 30.260 et. seq., the Port shall indemnify, save harmless and defend Hall-Buck, its directors, officers, employees, representatives, and agents from and against all claims and actions and all expenses incidental to the investigation and defense thereof, based upon or arising out of injuries or damages to third persons or their property, caused by the fault or negligence of the Port, or its agents in carrying out this Agreement.

Amended Article 16

Section 6.2 - Insurance:

A. Hall-Buck shall keep the Premises herein leased together with the Facility and any and all improvements placed thereon conti-

nuously insured with an insurance underwriter(s) satisfactory to the Port and authorized to do business in Oregon. The policy(ies) shall be written on an all risk form including flood and earthquake in an amount equal to 80% of the actual cash value of the Facility. Said replacement value as of the inception date of this Agreement is \$4,300,000 for the Facility. The Port shall maintain all risk property insurance on the wharf, pier, apron, and any other area not under the sole control of Hall-Buck.

B. Hall-Buck shall maintain a terminal operators liability policy and comprehensive general and automobile liability insurance for the protection of Hall-Buck, directors, officers, servants, and employees, insuring Hall-Buck against liability for damages because of personal injury, bodily injury, death, or damage to property, including loss of use thereof, and occurring on or in any way related to the Facility or Premises or occasioned by reason of the operations of Hall-Buck with insurance of not less than \$1,000,000 combined single limit.

C. All insurance shall name the Port, its commissioners, officers, and employees as additional named insureds with the stipulation that this insurance, as to the interest of the Port only therein, shall not be invalidated by any act or neglect or breach of contract by Hall-Buck.

D. Hall-Buck shall maintain in force Workers' Compensation insurance, including coverage for Employer's Liability and the Longshoremen's and Harbor Workers' Compensation Act.

E. Hall-Buck shall furnish to the Port a certificate(s) of insurance evidencing the date, amount, and type of insurance that has been procured pursuant to this Terminal Lease. All policies of insurance will provide for not less than thirty days' written notice to the Port and Hall-Buck before such policies may be revised, nonrenewed, or cancelled.

Section 6.3 - Waiver of Subrogation: The Port and Hall-Buck agree that each forfeits any right of action that it may later acquire against the other of the parties to the Terminal Lease for loss or damage to its property, or to property in which it may have an interest, where such loss is caused by fire, or any of the extended coverage hazards, and arises out of or is connected with the leasing of the Premises.

Section 6.4 - Damage or Destruction of Premises: If the Facility or leased Premises or any improvements thereon are damaged or destroyed by fire or other casualty, Hall-Buck: (1) shall promptly repair, rebuild, or restore the property damaged or destroyed to substantially the same condition consistent with drawings and plans as approved by the Port, marked Exhibit B as attached, and in accordance with the applicable building codes as existed at the time of loss

causing such damage or destruction; and (2) shall apply for such purpose so much as may be necessary of any net proceeds of insurance resulting from claims for such losses, as well as any additional money of Hall-Buck necessary therefor.

Section 6.5 - Damage or Destruction of Preferential Use Areas:

If the Preferential Use area as defined in Section 1.2 or any improvement thereon is damaged or destroyed by fire or other casualty, the Port shall have the option of replacing said Preferential Use area, terminal facilities or improvements to substantially the same condition or to provide Hall-Buck with alternative arrangements to serve the Facility which permits Hall-Buck to operate its Facility without diminution of its capacity as set forth in Section 4.1.

ARTICLE VII - DEFAULT

Section 7.1 - Events of Default: The occurrence of the following events shall constitute defaults of this Terminal Lease Agreement:

A. Default in Rent: Failure of Hall-Buck to pay any rent or other charge within ten days after it is due shall result in an automatic termination of this Terminal Lease. Hall-Buck's liability to the Port shall survive such automatic termination. Hall-Buck shall have an irrevocable right to reinstate this Lease for nonpayment of rent within ten days after notice of its termination by tendering to Port all past due and presently due rent and other charges.

B. Default in Other Covenants: Failure of Hall-Buck to comply with any term or condition or fulfill any obligation of the Terminal Lease (other than the payment of rent or other charges) within ten days after written notice by Port specifying the nature of the default with reasonable particularity. If the default is of such a nature that it cannot be completely remedied within the ten-day period, this provision shall be complied with if Hall-Buck begins correction of the default within the ten-day period and thereafter proceeds with reasonable diligence and in good faith to effect the remedy as soon as practicable.

C. Insolvency: Insolvency of Hall-Buck; an assignment by Hall-Buck for the benefit of creditors; the filing by Hall-Buck of a voluntary petition in bankruptcy; an adjudication that Hall-Buck is bankrupt or the appointment of a receiver of the properties of Hall-Buck; the filing of an involuntary petition of bankruptcy and failure of Hall-Buck to secure a dismissal of the petition within thirty days after filing; attachment of or the levying of execution on the leasehold interest and failure of Hall-Buck to secure discharge of the attachment or release of the levy of execution within ten days.

D. Abandonment: Failure of Hall-Buck for fifteen days or more to occupy the property for one or more of the purposes permitted under this Terminal Lease unless such failure is excused under other provisions of this Terminal Lease.

Amended Article 17

Section 7.2 - Remedies on Default:

A. Notice: In the event of a default under the provision of Section 7.1 B and C, the Port at its option may terminate the Terminal Lease by notice in writing by certified mail to Hall-Buck. The notice may be given before or within ten days after the running of the grace period for default and may be included in a notice of failure of compliance. If the property is abandoned by Hall-Buck, termination shall be automatic and without notice.

B. Damages: In the event of termination on default, the Port shall be entitled to recover immediately, without waiting until the due date of any future rent or until the date fixed for expiration of the Lease term, the value of Hall-Buck's obligations under this Lease, including but not limited to the obligation to pay rent, plus the reasonable cost of reentry and reletting, including, without limitation, the cost of any cleanup, refurbishing, removal of Hall-Buck's property and fixtures or any other expense occasioned by Hall-Buck's failure to quit the demised Premises upon termination or to leave the Premises in the required condition, attorney's fees and court costs.

C. Other Remedies Provided By Law: In addition to the remedies provided in Subsection B of Section 7.2, the Port may at any time exercise any other remedies available to it under law or equity in the event of a default by Hall-Buck. Suit(s) or action(s) for the recovery of the rents and other amounts and damages, or for the

recovery of possession may be brought by the Port from time to time, at Port's election, and nothing in this Lease will be deemed to require Port to await the date on which the Lease Term expires. Each right and remedy in this Lease will be cumulative and will be in addition to every other right or remedy in this Lease or existing at law or in equity or by statute or otherwise, including, without limitation, suits for injunctive relief and specific performance. The exercise or beginning of the exercise by Port of any such rights or remedies will not preclude the simultaneous or later exercise by Port of any other such rights or remedies. All such rights and remedies are nonexclusive.

ARTICLE VIII - TERMINATION

Upon termination of this Terminal Lease for default or through the passage of time, or at the end of fifteen years from the Date of Execution of this Agreement, whichever period shall occur first, Hall-Buck shall surrender possession of the Facility and Premises peacefully and promptly, and shall, at the option of the Port evidenced by written notice to Hall-Buck: (a) remove the Facility and all structures, installations, or improvements except rail tracks from the Premises within one hundred twenty days after termination and restore the Premises to its original condition, all at the expense of Hall-Buck; or (b) surrender the Facility and all structures, installations, or improvements existing on the Premises, free of all encumbrances, liens, or security interests, as the property of the Port without requirement of the payment of any compensation or consideration by the Port.

ARTICLE IX - GENERAL PROVISIONS

Section 9.1 - Assignment and Sublease: No part of the leased Premises or Facility may be assigned, mortgaged, or subleased, nor may a right of use of any portion of the property, including assignments of the leasehold interest for security purposes, be conferred on any third person by any other means, without the prior written consent of the Port. The Port's consent may not be unreasonably withheld. The parties recognize that, during the term of this Agreement, Hall-Buck and ANSAC may form a new joint venture to operate the facility. If Hall-Buck is not then in default of this Lease, the Port will consent to an assignment of this Agreement to the newly formed Hall-Buck/ANSAC joint venture if this newly formed entity has the financial ability, key personnel, and business experience to perform all obligations under this Agreement.

Notwithstanding any other provision contained in this Agreement, Hall-Buck shall not grant to any person or execute any security interest, mortgage, trust deed, or other instrument which purports to give a third party any rights in the Facility, improvements, or structures to be constructed pursuant this Lease Agreement which are superior to the Port's rights to the Facility, improvements, or structures.

Any assignment or attempted assignment without the Port's prior written consent shall be void.

No consent in one instance shall prevent the provision from applying to a subsequent instance. The Port shall consent to a transaction covered by this provision when withholding such consent would be unreasonable in the circumstances.

In determining whether to consent to sublease or assignment, the Port may consider the following factors: financial ability; business experience; intended use; value of sublease or assignment.

Section 9.2 - Condemnation:

A. Either party receiving any notice of intended taking, any service of legal process relating to condemnation or any other notification in connection with any taking, condemnation or purchase, sale or transfer in lieu of condemnation shall promptly give the other party notice of such receipt. The Port, Hall-Buck and any leasehold mortgagee shall have the right to represent its respective interest in each such proceeding or negotiation and to make full proof of its claims. No sale, transfer, agreement, or settlement with the condemning authority shall be made without the consent of the Port and Hall-Buck. For purposes of this Terminal Lease, taking or condemnation includes a sale to a purchaser with the power of eminent domain in the face of a threat or the probability of the exercise of the power.

B. If the leased Premises or any interest therein is taken as a result of the exercise of the right of eminent domain during the term of this Lease, this Terminal Lease shall terminate as to such portion

as may be taken. If the portion taken does not feasibly permit the continuation of the operation of the Facility by Hall-Buck, Hall-Buck shall have the right to cancel. Such cancellation shall be effective as of the date of taking. The Port shall be entitled to that portion of the award as represented by the land, the improvements existing on the Premises on the Date of Execution of this Lease, plus the improvements placed on the Premises during the term of the agreement at the Port's expense, plus the value of the amortized Facility and improvements constructed by Hall-Buck. For purposes of determining the value of the amortized Facility and improvements, the parties agree that Hall-Buck will totally amortize the Facility and all improvements over the fifteen years from the commencement date of this Lease.

Section 9.3 - Terminal Tariff and Dockage Charges: The Port and Hall-Buck agree that during the lease term and any extensions thereof, the Port reserves the exclusive right to assess and collect dockage charges on all vessels berthing at the Facility in accordance with the Port of Portland published tariffs in effect at the time of berthing.

Section 9.4 - Labor Agreements: Hall-Buck recognizes an agreement made between International Longshoremen's and Warehousemen's Union, Locals 8 and 40 and 92, and the Port of Portland dated December 9, 1981, that "New leases or operating agreements by The Port involving such 'Public Cargo Handling Facilities' owned or controlled by the Port or hereafter owned or controlled by the Port shall provide

that any traditional longshore and warehouse work assignment provisions of the ILWU-PMA Agreements dated July 1, 1987, are applicable to the signatories of this Agreement and their lessees and assigns."

Hall-Buck recognizes an Agreement made between the District Council of Trade Unions and Columbia-Pacific Building and Construction Trades Council and the Port of Portland dated April 10, 1985, that "the scope of this Agreement shall include any marine cargo handling facilities leased by the Port to an independent operator to the extent the Port retains the responsibility for the maintenance or repair of any such leased facility or facilities. In the event the Port leases any existing facilities that are covered under this Agreement to an independent operator, and such operator is responsible for maintenance of such facility, the jurisdiction of the respective crafts shall be maintained in respect to any personnel employed by such operator to perform work covered by the scope of this Agreement and such employees performing such work shall receive not less than the terms and conditions of this Agreement."

Section 9.5 - Force Majeure: If by reason of force majeure Hall-Buck is unable in whole or in part to carry out its obligations under this Terminal Lease, Hall-Buck shall not be deemed in default during the continuance of such inability, provided notice thereof is given to the Port and Hall-Buck makes the Minimum Guarantee payment as provided in Sections 3.2 and 3.5. The term "force majeure" as used

herein shall mean, without limitation, the following: acts of God; strikes, lock-outs of other industrial disturbances; acts of public enemies; orders or restraints of the United States of America or the State of Oregon, or their respective departments, agencies, or officials, or any civil or military authority; insurrections; riots; earthquakes; fires; storms; droughts; floods; explosions; breakage or accident to machinery; or any other cause or event not reasonably within the control of Hall-Buck and not resulting from its negligence. Hall-Buck agrees, however, to remedy with all reasonable dispatch the cause or causes preventing Hall-Buck from carrying out its Agreement, provided that the settlement of strikes, lockouts or other industrial disturbances shall be entirely within the discretion of Hall-Buck and Hall-Buck shall not be required to make settlement of strikes, lockouts, or other industrial disturbances by acceding to the demands of the opposing party or parties when such course is in the judgment of Hall-Buck unfavorable to Hall-Buck. Notwithstanding any other provision contained in the Lease, Hall-Buck shall continue to be obligated to pay the Minimum Guaranteed Annual Rent as provided in Section 3.2, as adjusted pursuant to Sections 3.4, 3.5, and 3.6.

Section 9.6 - Nonwaiver: Waiver by either party of strict performance of any provision of this Terminal Lease shall not be a waiver of or prejudice the party's right to require strict performance of the same provision in the future or of any other provision.

Section 9.7 - Attorney Fees: If suit or action is instituted in connection with any controversy arising out of this Terminal Lease, the prevailing party shall be entitled to recover in addition to costs such sum as the court may adjudge reasonable as attorney fees, or in the event of appeal as allowed by the appellate court.

Amended Article 18

Section 9.8 - Statutory Provisions: This Terminal Lease shall be governed by the laws of the State of Oregon. The contract provisions required by ORS Chapter 279 to be included in public contracts are hereby incorporated by reference and shall become a part of this Terminal Lease as if fully set forth herein. Hall-Buck shall comply with all permits, adhere to all applicable federal, state, and local laws, rules, regulations, and ordinances, including laws governing its relationship with its employees, including but not limited to laws, rules, regulations, and policies concerning Workers' Compensation, and minimum and prevailing wage requirements.



Section 9.9 - Time of Essence: It is mutually agreed that time is of the essence in the performance of all covenants and conditions to be kept and performed under the terms of this Terminal Lease.

Section 9.10 - Warranties/Guarantees: The Port makes no warranty, guarantee, or averment of any nature whatsoever concerning the physical condition of the leased premises, and it is agreed that the Port will not be responsible for any loss, damage, or costs which may be incurred by Hall-Buck by reason of any such physical condition.

Section 9.11 - Consent of Port: Whenever consent, approval, or direction by the Port is required under the terms contained herein, all such consent, approval, or direction shall be received in writing from the Executive Director of The Port of Portland.

Section 9.12 - Notices: All notices required under this Terminal Lease shall be deemed to be properly served if sent by certified mail to the last address previously furnished by the parties hereto. Until hereafter changed by the parties by notice in writing, notices shall be sent to the Port at The Port of Portland, Post Office Box 3529, Portland, Oregon 97208, and to Hall-Buck Marine, Inc., P.O. Box 35, Burnside, LA 70738. Date of Service of such notice is date such notice is deposited in a post office of the United States Post Office Department, postage prepaid.

Section 9.13 - Pledge of Leasehold Interest: Hall-Buck may, from time to time, pledge its leasehold interest in buildings, structures, and fixtures as security for (a) bona fide loan(s) from (a) reputable lender(s) or lending institution(s). The leasehold interest shall not include any interest in the land of the Port known as the demised Premises in this Lease and such leasehold interest shall be automatically extinguished upon termination of the lease.

Section 9.14 - Entire Agreement: It is understood and agreed that this instrument contains the entire Agreement between the parties hereto. It is further understood and agreed by Hall-Buck that Port

and Port's agents have made no representations or promises with respect to this Agreement or the making or entry into this Agreement, except as in this Agreement expressly set forth, and that no claim or liability or cause for termination shall be asserted by Hall-Buck against Port for, and Port shall not be liable by reason of, the breach of any representations or promises not expressly stated in this Agreement, any other written or oral agreement with Port being expressly waived by Hall-Buck, it being understood that the Port requires agreements to be in writing and adopted by Port Commission.

The individuals executing this Agreement warrant that they have full authority to execute this Lease on behalf of the entity for whom they are acting herein.

The parties hereto further acknowledge that they thoroughly read this Agreement, including any exhibits or attachments hereto, and have sought and received whatever competent advice and counsel was

// Amended Article 18
//
// Section 9.15
// 9.16
// 9.17
//
// Add Article 20
//
// Article 21
// Article 22
//

EXHIBIT C

HALL-BUCK MARINE, INC.
PROJECT COST SUMMARY
PORTLAND BULK TERMINAL

A. Spantec International, Inc. - Contract Items

1. Engineering	\$ 150,000
2. Project Mobilization	130,000
3. Paving and Railway Work	120,000
4. Railcar Off-loading Pit/Superstructure	345,000
5. Feeders, Conveyors, and Support Steel	1,150,000
6. Railcar Moving and Unloading Equipment	240,000
7. Ship Loading Equipment	390,000
8. Ship Moving System	200,000
9. Pollution Control (Dust and Washdown)	340,000
10. Electrical	300,000
11. Project Supervision	148,800
12. Change orders as of September 21, 1987	30,000

TOTAL SPANTEC COST: \$3,543,800

B. Hall-Buck Marine Furnished Items and Services - Estimated Cost:

1. Modifications to existing warehouse (including providing elevated office for ILWU supercargoes).	\$ 13,000
2. Modifications to existing service building for operations offices/employee facilities.	15,000
3. Telephone system and communication equipment for ILWU.	12,000
4. Terminal manager's automobile.	12,000
5. Terminal pickup truck.	12,000
6. Office furniture and supplies.	10,000
7. Spare parts.	80,000
8. Small tools, welding and cutting equipment, etc., for operations/maintenance.	14,000
9. Security fence and temporary guard service.	12,000
10. Interim interest.	125,000
11. Project administration by HBM.	74,000
12. Shuttle wagon	105,000
13. Performance bond on entire project (\$4.3 M) as required by Port of Portland.	27,000
14. Miscellaneous contingency.	40,000
15. Project contingency	205,200

TOTAL HBM DIRECT COSTS: \$ 756,200

TOTAL PROJECT COSTS: \$4,300,000

10/30/87
4521d:75K395

EXHIBIT D

TERMINAL DRY BULK EXPORT FACILITY CONSTRUCTION CONTRACT

THIS TERMINAL DRY BULK EXPORT FACILITY CONSTRUCTION CONTRACT, dated October 30,, 1987, by and between THE PORT OF PORTLAND, a municipal corporation of the state of Oregon, hereinafter referred to as "Port," and HALL-BUCK MARINE, INC., hereinafter referred to as "Hall-Buck," a corporation organized under the laws of the state of Louisiana,

W I T N E S S E T H:

WHEREAS, the Port and Hall-Buck have entered into a Terminal Use and Development Contract on October 30, 1987 ("Contract"); and

WHEREAS, in order to permit Hall-Buck to obtain a Performance and Payment Bond for the construction of the Dry Bulk Export Facility, said Performance Bond marked Exhibit D, and incorporated by reference herein, the Port and Hall-Buck desire to set forth Hall-Buck's construction obligations in a separate contract;

NOW THEREFORE, in consideration of those mutual promises and the terms and conditions set forth hereafter, the parties agree as follows:

ARTICLE I - HALL-BUCK OBLIGATIONS

Section 1.1 - Construction of Facility:

A. Hall-Buck shall construct, or cause to be constructed, a dry bulk export facility (Facility) upon the Premises at Terminal 4 consisting of approximately one acre of a paved area adjacent to Berths 410 and 411 as shown in Exhibit A, attached hereto and made a part hereof, including rails, associated buildings, and utilities, and hereinafter referred to as "Premises." This Facility shall be constructed in accordance with the plans and specifications contained in Exhibit B, attached hereto and made a part hereof, at a cost of \$ 4,300,000.00. The Facility shall be constructed to unload soda ash and other compatible mineral bulk commodities, by rail and load vessels berthed at a dock located upon the Premises consistent with Exhibit B and future changes as approved by the Port in writing. The Facility shall have a designed capacity to transfer soda ash from rail to ship of at least 1,500 tons per hour.

B. Prior to any planned construction, alteration, or changes upon the Premises, Hall-Buck shall submit to Port final plans and specifications, site-use plan, and architectural rendering thereof and shall not commence any construction until it has received Port's written approval. All plans for construction, alteration, or changes to the Facility or any other modifications to the Premises during the term of this Contract shall be prepared and signed by an architect or engineer registered in the State of Oregon. All landscape plans, to the extent they are required to landscape pursuant to city code, shall

be prepared and signed by a landscape architect registered in the State of Oregon. Should Port fail to take action concerning plans and/or specifications submitted to it within forty-five days, said plans and/or specifications shall be deemed approved.

Hall-Buck shall, as a condition of this Contract, invest or cause to be invested directly in the improvements to be made upon the demised Premises under this Contract not less than 90% of the cost estimates as set forth in the attached Exhibit C, the provisions of which are hereby incorporated by reference, made by Hall-Buck for the design, engineering, construction, equipping, furnishing, and landscaping of the Premises in a manner so specified in such Exhibit B.

C. Hall-Buck shall be responsible for obtaining all necessary local building permits and authorizations prior to operation of the Facility.

D. Hall-Buck shall begin construction of the Facility no later than one month after the Date of Execution of this Contract, and shall substantially complete construction within nine months from the start of construction. At the time of execution of this Contract, Hall-Buck shall execute and deliver to the Port a 100% performance and payment bond, insuring construction and completion of the improvements contemplated herein and payment of all contractors and subcontractors, and jointly and severally binding and holding Hall-Buck and a surety authorized to transact business in the State of Oregon to the Port and

guaranteeing the faithful performance of Hall-Buck's obligation to construct and complete the improvements required by this contract's construction requirements.

For purposes of this Contract and the Performance and Payment Bond, the word "Work" means the entire completed construction (or the various separately identifiable parts) required under this Contract. "Work" is the result of performing services; furnishing labor; and furnishing and incorporating materials, equipment, and all other necessary items as required by the Contract.

Section 1.2 - Substantial Completion: When Hall-Buck considers the Facility to be substantially complete, Hall-Buck shall submit to the Port a written notice of substantial completion. The Port shall then make such inspection or review as necessary to determine that the Facility is acceptable, constructed in accordance with the terms and conditions of this Contract, and ready for use and occupancy. Substantial completion of construction shall mean that construction has progressed to the point where, in the written opinion of both the Port and Hall-Buck, said written opinion to be signed by both parties prior to any ship loading, the Facility is sufficiently complete and is available for commercial loading of bulk commodities.

Section 1.3 - Compliance with Permits and Standards: Hall-Buck shall comply with the requirements of all permits obtained by the Port or Hall-Buck from the Oregon Department of Environmental Quality,

State Land Board, U.S. Army Corps of Engineers, and all requirements of other federal agencies and local jurisdictions. Hall-Buck shall pay any fines or penalties which may be rendered for violation of such permits.

Section 1.4 - Utilities: Hall-Buck shall promptly pay any charges for sewer, water, gas, electricity, telephone, and all other charges for utilities which may be furnished to the Facility or leased Premises, including the installation of metering devices necessary to meter the utilities. Hall-Buck shall be responsible for any additional costs necessary to bring the utilities to the Facility or Premises.

Section 1.5 - Liens: Hall-Buck agrees to pay, when due, all sums of money that may become due for, or purporting to be for, any labor, services, materials, supplies, utilities, furnishings, machinery, or equipment which have been furnished or ordered with Hall-Buck's consent to be furnished to or for Hall-Buck in, upon, or about the Facility or Premises herein leased, which may be secured by any mechanics', materialsmen's, or other lien against the Facility or Premises herein leased or Port's interest therein, and will cause each such lien to be fully discharged and released at the time the performance of any obligation secured by any such lien matures or becomes due, provided that Hall-Buck may in good faith contest any mechanics' or other liens filed or established, and in such event may permit the items so contested to remain undischarged and unsatisfied during the period of such contest.

Section 1.6 - Taxes: Hall-Buck agrees to pay all lawful taxes and assessments which during the term hereof or any extension may become a lien or which may be levied by the state, county, city, or any other tax-levying body upon the Facility or Premises or upon any taxable interest by Hall-Buck acquired in this Contract or any taxable possessory right which Hall-Buck may have in or to the Facility, Premises, or facilities hereby leased or the improvements thereon by reason of its occupancy thereof as well as all taxes on all taxable property, real or personal, owned by Hall-Buck in or about said Facility or Premises. Upon making such payments, Hall-Buck shall give to the Port a copy of the receipts and vouchers showing such payment. Upon any termination of tenancy, all taxes then levied or then a lien on any of said property or taxable interest therein shall be paid in full without proration by Hall-Buck forthwith or as soon as a statement thereof has been issued by the tax collector.

ARTICLE II - INDEMNITY AND INSURANCE

Section 2.1 - Indemnity: Hall-Buck agrees fully to indemnify, save harmless, and defend the Port, its commissioners, officers and employees from and against all claims and actions and all expenses incidental to the investigation and defense thereof, including but not limited to those claims or actions, based upon or arising out of damages or injuries to third persons or their property, caused by the fault or negligence in whole or in part of Hall-Buck, its subtenants, or employees in the construction; provided that the Port shall give to Hall-Buck prompt and reasonable notice of any such claims or actions,

and Hall-Buck shall have the right to investigate, compromise, and defend same, provided such claim is not the result of negligent act of the Port.

Section 2.2 - Insurance:

A. Hall-Buck shall maintain comprehensive general and automobile liability insurance for the protection of Hall-Buck, directors, officers, servants, and employees, insuring Hall-Buck against liability for damages because of personal injury, bodily injury, death, or damage to property, including loss of use thereof, and occurring on or in any way related to this Contract.

B. All insurance shall name the Port, its commissioners, officers, and employees as additional named insureds with the stipulation that this insurance, as to the interest of the Port only therein, shall not be invalidated by any act or neglect or breach of contract by Hall-Buck.

C. Hall-Buck shall maintain in force Workers' Compensation insurance, including coverage for Employer's Liability and the Longshoremen's and Harbor Workers' Compensation Act.

D. Hall-Buck shall furnish to the Port a certificate(s) of insurance evidencing the date, amount, and type of insurance that has been procured pursuant to this Contract. All policies of insurance will provide for not less than thirty days' written notice to the Port

and Hall-Buck before such policies may be revised, nonrenewed, or cancelled.

Section 2.3 - Waiver of Subrogation: The Port and Hall-Buck agree that each forfeits any right of action that it may later acquire against the other of the parties to the Contract for loss or damage to its property, or to property in which it may have an interest, where such loss is caused by fire, or any of the extended coverage hazards, and arises out of or is connected with this construction Contract.

ARTICLE III - DEFAULT

Section 3.1 - Events of Default: The occurrence of the following events shall constitute defaults of this Contract:

A. Default in Contract Covenants: Failure of Hall-Buck to comply with any term or condition or fulfill any obligation of the Contract within ten days after written notice by Port specifying the nature of the default with reasonable particularity. If the default is of such a nature that it cannot be completely remedied within the ten-day period, this provision shall be complied with if Hall-Buck begins correction of the default within the ten-day period and thereafter proceeds with reasonable diligence and in good faith to effect the remedy as soon as practicable.

B. Insolvency: Insolvency of Hall-Buck; an assignment by Hall-Buck for the benefit of creditors; the filing by Hall-Buck of a voluntary petition in bankruptcy; an adjudication that Hall-Buck is

bankrupt or the appointment of a receiver of the properties of Hall-Buck; the filing of an involuntary petition of bankruptcy and failure of Hall-Buck to secure a dismissal of the petition within thirty days after filing; attachment of or the levying of execution on this construction Contract.

Section 3.2 - Remedies on Default:

A. Notice: In the event of a default under the provision of this Contract, the Port at its option may terminate the Contract by notice in writing by certified mail to Hall-Buck. The notice may be given before or within ten days after the running of the grace period for default and may be included in a notice of failure of compliance.

B. Other Remedies Provided By Law: The Port may at any time exercise any remedies available to it under law or equity in the event of a default by Hall-Buck. Suit(s) or action(s) for the damages, or for the recovery of possession may be brought by the Port from time to time, at Port's election, and nothing in this Contract will be deemed to require Port to await the date on which the Contract Term expires. Each right and remedy in this Contract will be cumulative and will be in addition to every other right or remedy in this Contract or existing at law or in equity or by statute or otherwise, including, without limitation, suits for injunctive relief and specific performance. The exercise or beginning of the exercise by Port of any such rights or remedies will not preclude the simultaneous or later

exercise by Port of any other such rights or remedies. All such rights and remedies are nonexclusive.

ARTICLE IV - GENERAL PROVISIONS

Section 4.1 - Term: The terms of this Contract shall be from the date of its execution until August 1, 1988. Hall-Buck shall complete all Contract work by August 1, 1988, unless the term is extended by mutual consent.

Section 4.2 - Nonwaiver: Waiver by either party of strict performance of any provision of this Contract shall not be a waiver of or prejudice the party's right to require strict performance of the same provision in the future or of any other provision.

Section 4.3 - Attorney Fees: If suit or action is instituted in connection with any controversy arising out of this Contract, the prevailing party shall be entitled to recover in addition to costs such sum as the court may adjudge reasonable as attorney fees, or in the event of appeal as allowed by the appellate court.

Section 4.4 - Statutory Provisions: This Contract shall be governed by the laws of the State of Oregon. The contract provisions required by ORS Chapter 279 to be included in public contracts are hereby incorporated by reference and shall become a part of this Contract as if fully set forth herein. Hall-Buck shall comply with all permits, adhere to all applicable federal, state, and local laws,

rules, regulations, and ordinances, including laws governing its relationship with its employees, including but not limited to laws, rules, regulations, and policies concerning Workers' Compensation, and minimum and prevailing wage requirements.

Section 4.5 - Time of Essence: It is mutually agreed that time is of the essence in the performance of all covenants and conditions to be kept and performed under the terms of this Contract.

Section 4.6 - Warranties/Guarantees: The Port makes no warranty, guarantee, or averment of any nature whatsoever concerning the physical condition of the leased premises, and it is agreed that the Port will not be responsible for any loss, damage, or costs which may be incurred by Hall-Buck by reason of any such physical condition.

Section 4.7 - Consent of Port: Whenever consent, approval, or direction by the Port is required under the terms contained herein, all such consent, approval, or direction shall be received in writing from the Executive Director of The Port of Portland.

Section 4.8 - Notices: All notices required under this Contract shall be deemed to be properly served if sent by certified mail to the last address previously furnished by the parties hereto. Until hereafter changed by the parties by notice in writing, notices shall be sent to the Port at The Port of Portland, Post Office Box 3529, Portland, Oregon 97208, and to Hall-Buck Marine, Inc., P.O. Box 35,

Burnside, LA 70738. Date of Service of such notice is date such notice is deposited in a post office of the United States Post Office Department, postage prepaid.

IN WITNESS WHEREOF, the parties hereto execute this Contract on the 30 day of October 1987, which is the designated "Date of Execution" and have subscribed their names below.

HALL-BUCK MARINE, INC.

THE PORT OF PORTLAND

By Harlan S. Haege
President

By [Signature]
President

By _____

By [Signature]
Assistant Secretary

APPROVED AS TO LEGAL SUFFICIENCY

APPROVED AS TO LEGAL SUFFICIENCY

Counsel for Hall-Buck

M B Playfair
Counsel for
The Port of Portland

APPROVED BY COMMISSION ON

October 14, 1987

October 30, 1987

Date of Execution

10/28/87
3938L:12K288

EXHIBIT C

HALL-BUCK MARINE, INC.
PROJECT COST SUMMARY
PORTLAND BULK TERMINAL

A. Spantec International, Inc. - Contract Items

1. Engineering	\$ 150,000
2. Project Mobilization	130,000
3. Paving and Railway Work	120,000
4. Railcar Off-loading Pit/Superstructure	345,000
5. Feeders, Conveyors, and Support Steel	1,150,000
6. Railcar Moving and Unloading Equipment	240,000
7. Ship Loading Equipment	390,000
8. Ship Moving System	200,000
9. Pollution Control (Dust and Washdown)	340,000
10. Electrical	300,000
11. Project Supervision	148,800
12. Change orders as of September 21, 1987	30,000

TOTAL SPANTEC COST: \$3,543,800

B. Hall-Buck Marine Furnished Items and Services - Estimated Cost:

1. Modifications to existing warehouse (including providing elevated office for ILWU supercargoes).	\$ 13,000
2. Modifications to existing service building for operations offices/employee facilities.	15,000
3. Telephone system and communication equipment for ILWU.	12,000
4. Terminal manager's automobile.	12,000
5. Terminal pickup truck.	12,000
6. Office furniture and supplies.	10,000
7. Spare parts.	80,000
8. Small tools, welding and cutting equipment, etc., for operations/maintenance.	14,000
9. Security fence and temporary guard service.	12,000
10. Interim interest.	125,000
11. Project administration by HBM.	74,000
12. Shuttle wagon	105,000
13. Performance bond on entire project (\$4.3 M) as required by Port of Portland.	27,000
14. Miscellaneous contingency.	40,000
15. Project contingency	205,200

TOTAL HBM DIRECT COSTS: \$ 756,200

TOTAL PROJECT COSTS: \$4,300,000

10/30/87
4521d:75K395

AMENDMENT NO. 1
to
TERMINAL LEASE
between
HALL-BUCK MARINE and THE PORT OF PORTLAND

This LEASE AMENDMENT No. 1, dated this 24th day of NOVEMBER, 1993, is an amendment to the TERMINAL LEASE (Port Lease No. 87-109) dated October 30, 1987, between the PORT OF PORTLAND (hereinafter referred to as the "Port"), and HALL-BUCK MARINE, INC. (hereinafter referred to as "Hall-Buck"), which lease is hereinafter referred to as the "Terminal Lease".

RECITALS

WHEREAS, the Port and Hall-Buck have an ongoing relationship involving the lease, development and use of certain portions of the Port's Terminal No. 4 for the export of soda ash and other bulk commodities.

WHEREAS, Hall-Buck desires the use of a larger area at the Port's Terminal 4 facility to facilitate an agreement between it and the American Soda Ash Corporation (ANSAC).

WHEREAS, Hall-Buck and the Port are entering into an agreement for the construction of a facility for the storage of bulk soda ash (Bulk Storage Facility) which Hall-Buck will construct and thereafter lease and operate.

WHEREAS, the Port is willing to amend the Terminal Lease between it and Hall-Buck for the use of the larger area at Terminal 4 and Hall-Buck is willing to enter into such an amendment.

NOW, THEREFORE, based on the foregoing, the Port and Hall-Buck agree to amend the Terminal Lease as follows:

ARTICLE 1 -- PREMISES

As of the Effective Date as provided in Article 20 of this Amendment, the real property consisting of approximately 6.56 acres as shown on the map attached hereto as Exhibit 1, Drawing No. T-4 93-7, shall become a part of the "Premises", as defined in the Lease. Upon completion of construction of the Bulk Storage Facility as required by Article IV of this Amendment, the Bulk Storage Facility shall become a part of the Premises.

ARTICLE 2 - USE OF THE BULK STORAGE FACILITY

The following shall be added as the third paragraph to Section 1.5 of the Terminal Lease:

Hall-Buck shall not use or allow the use of the Bulk Storage Facility or any part thereof for any unlawful purpose or in violation of any certificate of occupancy, any certificate of compliance, or of any other certificate, law, statute, ordinance, or regulation covering or affecting the use of the Premises or any part thereof. Hall-Buck shall not permit any act to be done or any condition to exist on the Premises or any part thereof which may be hazardous, which may constitute a nuisance, or which may void or make voidable any policy of insurance in force with respect to the Premises or Bulk Storage Facility.

ARTICLE 3 -- TERM

Section 2.1 - Term shall be amended to include a sentence added on to read:

The term of the Terminal Lease is extended through June 30, 1999.

Section 2.2 - Renewal Option shall be modified to read as follows:

Section 2.2 - Renewal Options: If Hall-Buck is not then in default, Hall-Buck shall have three options to renew this Terminal Lease on the same terms and conditions except for the establishment of rentals as herein provided. Each option shall be for the following five year periods and shall be exercised in writing given to the Port not less than one hundred and eighty days prior to the last day of the expiring term:

First Option: July 1, 1999 to June 30, 2004

Second Option: July 1, 2004 to June 30, 2009

Third Option: July 1, 2009 to June 30, 2014.

Section 2.3 - Third Option of the Terminal Lease shall be deleted in its entirety.

ARTICLE 4 - MINIMUM ANNUAL GUARANTEE RENT

Section 3.2 of the Terminal Lease shall be deleted in its entirety and the following substituted:

As of the Effective Date, Hall-Buck shall pay the Port a Minimum Annual Guarantee Rent ("Minimum Guarantee") equal to 1,000,000 metric tons of all commodities combined, to which Minimum Guarantee the applicable throughput charge is applied as described in Section 3.3. For purposes of determining the period to which the Minimum Guarantee is applicable, the period shall be from July 1 to June 30 of each year. Any shortfall in the payment of the Minimum Guarantee shall be determined based on the rates shown in Section 3.3(A) and (B).

ARTICLE 5 -- RENTAL

The Throughput Charges as set out in Section 3.3 (A) and (B) of the Terminal Lease are deleted and replaced by the following formula:

A. Soda Ash - Throughput Charges. Hall-Buck shall pay the Port throughput charges for all soda ash loaded on vessels by Hall-Buck at Terminal 4 in accordance with the following scale:

<u>Time Period</u>	<u>Tons Per Year</u>	<u>Throughput Charge Per Ton</u>	<u>CPI Adjustment</u>
8/1/93 -12/31/93	0 - 210,000	\$0.76/ton	N/A
	210,001 - 625,000	\$0.66	N/A
	Over 625,000	\$0.25	N/A
1/1/94 - 12/31/95	0 - 500,000	\$0.76	N/A
	500,001 - 1,500,000	\$0.66	N/A
	Over 1,500,000	\$0.25	N/A
1/1/96 - 6/30/96	0 - 250,000	\$0.76	N/A
	250,001 - 750,000	\$0.66	N/A
	Over 750,000	\$0.25	N/A
7/1/96 and thereafter	0 - 500,000	\$0.76	Per Sec. 3.4
	500,001 - 1,500,000	\$0.66	Per Sec. 3.4
	Over 1,500,000	\$0.25	Per Sec. 3.4

380,000
660,000
250,000
1,290,000

B. Soda Ash - Bulk Storage Facility Surcharge. From July 1, 1994 to June 30, 1999, Hall-Buck shall pay the Port the following Bulk Storage Facility surcharge for all soda ash loaded on vessels for ANSAC by Hall-Buck at Terminal 4, subject to an annual minimum/maximum guaranteed payment of \$385,000. This surcharge shall apply in addition to the soda ash throughput charges in Section 3.3 (A) above.

<u>Time Period</u>	<u>Tons Per Year</u>	<u>Throughput Charge Per Ton</u>	<u>CPI Adjustment</u>
7/1/94 - 6/30/99	All soda ash loaded for ANSAC	\$0.28/ton subject to an annual guaranteed minimum/maximum payment of \$385,000	N/A

C. All Other Commodities - Throughput Charges. Hall-Buck shall pay the Port throughput charges for all commodities other than soda ash loaded on vessels by Hall-Buck at Terminal 4 in accordance with the following scale:

<u>Time Period</u>	<u>Tons Per Year</u>	<u>Throughput Charge Per Ton</u>	<u>CPI Adjustment</u>
8/1/93 - 6/30/94	1 - 458,000	\$0.78/ton	Per Sec. 3.4
	over 458,000	\$0.68	Per Sec. 3.4
7/1/94 and thereafter	0 - 500,000	\$0.78/ton	Per Sec. 3.4
	Over 500,000	\$0.68	Per Sec. 3.4

ARTICLE 6 - ADJUSTMENT TO THROUGHPUT CHARGES

The first sentence of Section 3.4 of the Terminal Lease up to the colon shall be amended to read as follows:

The throughput charges to be paid by Hall-Buck to the Port which are designated in section 3.3 above to be adjusted shall be so adjusted as of July 1 of each year following August 1, 1993 according to the following formula:

The "Beginning Index" contained in the first paragraph of section 3.4 shall be changed from "1987" to "1992".

Sections 3.5 and 3.6 of the Terminal Lease shall be deleted in their entirety and the section numbers intentionally reserved without any text.

ARTICLE 7 -- HALL-BUCK CONSTRUCTION OBLIGATIONS

The following shall be added as paragraph F to Section 4.1 - Construction of Facility of the Terminal Lease:

F. As of the Effective Date of this Amendment No. 5, Hall Buck shall have the obligation to design and construct, or cause to be designed and constructed, the Bulk Storage Facility to be used for the storage of soda ash on the Premises, which design and construction shall be under the terms of this Amendment. The construction of the Bulk Storage Facility shall be pursuant to a Construction Contract between the Port and Hall-Buck which is substantially in the form of Exhibit 2, attached to this Amendment.

ARTICLE 8 - MAINTENANCE

The following shall be added as the first part of the first sentence of Paragraph A to Section 4.6 of the Terminal Lease:

Except for Port maintenance responsibilities identified in Section 5.4 below, . . .

ARTICLE 9 - UTILITIES

The following shall be added as the second paragraph to Section 4.8 of the Terminal Lease:

With respect to the Bulk Storage Facility and the part of the Premises around the Bulk Storage Facility, identified as the Storage Building Lease Area on Exhibit 1 all surface drainage, sewage disposal, roof drainage and other caught water related to the Premises or Bulk Storage Facility shall be conducted via underground drains or systems operated by the City of Portland or the Port, which connections shall be in a manner approved by the Port. Hall-Buck understands that there may be connection, maintenance or other fees associated with the

connection and use of such systems, which fees Hall-Buck agrees to pay.

ARTICLE 10 - LIENS

Section 4.9 of the Terminal Lease shall be deleted in its entirety and the following substituted:

Hall-Buck agrees to pay when due, all sums of money for or purporting to be for, any labor, services, materials, supplies, utilities, furnishings, machinery, or equipment furnished or ordered with Hall-Buck's consent in, upon, to or about the Premises or Bulk Storage Facility. Hall-Buck further agrees to pay all sums of money which may be secured by any mechanics', materialmen's, or other lien against the Premises or Bulk Storage Facility (or the Port's interest therein) and will cause each such lien to be fully discharged and released at the time the performance of any obligation secured by any such lien matures or becomes due. Hall-Buck may nevertheless contest in good faith any mechanics' or other lien, and in such event permit the items so contested to remain undischarged and unsatisfied during the period of such contest.

ARTICLE 11 - TAXES

Section 4.10 of the Terminal Lease shall be deleted in its entirety and the following shall be substituted:

Hall-Buck agrees to pay all taxes and assessments (in-lieu or otherwise) which during the term of the Terminal Lease or this Amendment may become a lien or which may be levied by the state, county, city, or any other tax-levying body upon the Premises or Bulk Storage Facility. Furthermore, Hall-Buck agrees to pay all taxes and assessments (in-lieu or otherwise) on any taxable interest obtained by Hall-Buck through this Amendment, or on any taxable possessory interest which Hall-Buck may have in or to the Premises by reason of its occupancy. Furthermore, Hall-Buck agrees to pay all taxes on all taxable property, real or personal, owned by it in or about the Premises or Bulk Storage Facility. Upon making such payments, Hall-Buck shall give the Port a copy of the receipts and vouchers showing payment.

Hall-Buck understands that Port property is exempt from property taxation until leased to a taxable entity. In the event that the term of the Terminal Lease or this Amendment ends after June 30 of any year, Hall-Buck shall be responsible for payment of property taxes for the entire tax year without proration, or, in the event of any change in property tax law, for any taxes due under such law. With respect to assessments for public improvements which are or may be payable in Bancroft installments, Hall-Buck shall be required to pay only those installments which become due during the term of the Terminal Lease or this Amendment. Hall-Buck understands that for the Premises to qualify for in-lieu real property tax assessments, it must request an appraisal and computation of the in-lieu tax from the Multnomah County Assessor's Office on or before the date established by ORS 307.120, and must pay the in-lieu tax. Furthermore, Hall-Buck understands that if such request is not made, the Premises and Bulk Storage Facility may be taxed as other property similarly situated which does not qualify for the in-lieu tax. The Port shall notify Hall-Buck of tax liability and/or in-lieu tax liability whenever it receives actual written notice of such. Other than the foregoing notice requirement, Hall-Buck hereby releases the Port from any liability for further notices of tax liability or in-lieu tax liability.

ARTICLE 12 - RAIL SWITCHING COORDINATION

Section 4.12 - Rail Switching: Hall-Buck shall exercise its best efforts, and shall exercise best efforts to cause Union Pacific, to coordinate rail switching operations between Union Pacific's rail yard and the Terminal 4 rail yard so as to minimize blockages of the Terminal 4 roadway at the northern end of the Terminal 4 rail yard between 7:00 a.m. to 6:00 p.m.

ARTICLE 13 - INSPECTION

The following shall be added as Section 4.13 of the Terminal Lease:

Section 4.13 - Port Inspection; Hazardous Substance Inspection: The Port shall at all times during ordinary business hours and upon the giving of reasonable notice have the right to enter upon the Premises or Bulk Storage Facility for the purposes of: (1) inspecting the same;

(2) confirming the performance by Hall-Buck of its obligations under the Terminal Lease or this Amendment; (3) doing any other act which the Port may be obligated or have the right to perform under the Terminal Lease or this Amendment (or reasonably related thereto); and (4) for any other lawful purpose.

The Port reserves the right to inspect Hall-Buck's management of Hazardous Substances as defined in Section 6.2(c), on the Premises or in the Bulk Storage Facility at any time and from time to time with such notice that is reasonable under all the circumstances to Hall-Buck or its subtenant, if any, in the event the Port has reason to believe that an emergency involving the safety of person(s) or property exists or there is an immediate threat of injury to person(s) or property arising out of activities or conduct involving Hazardous Substances on the Premises. If the Port at any time during the term of the Terminal Lease or this Amendment (or any extension(s) thereof) has reason to believe that Hall-Buck is managing Hazardous Substances in a manner that may allow contamination of any portion of the Premises, Bulk Storage Facility or adjacent waterways, the Port may conduct, at its sole expense, an environmental audit or assessment with respect to the matters of concern to the Port. In the event such audit or assessment discloses that contamination of the Premises has or is likely to have occurred during the occupancy of the Premises by Hall-Buck, then Hall-Buck shall thereafter be responsible for the conduct of any and all further audits, assessments, investigations, remedial and/or removal actions and all costs associated therewith. Hall-Buck shall fully cooperate with the Port in the performance of its obligations under this paragraph.

ARTICLE 14 - HAZARDOUS SUBSTANCE SPILLS

The following shall be added as Section 4.14 of the Terminal Lease:

Section 4.14 - Hazardous Substance Spills: Hall-Buck shall immediately notify the Port upon becoming aware of: (1) any leak, spill, release or disposal of a Hazardous Substance, as defined in Section 6.2(c), on, under, or adjacent to the Premises or Bulk Storage Facility or threat of or reasonable suspicion of any of the same;

and/or (2) any notice or communication directed to Hall-Buck from a governmental agency or other person relating to such Hazardous Substances on, under, or adjacent to the Premises or Bulk Storage Facility or any violation of any federal, state, or local law, regulation or ordinance with respect to the Premises or Bulk Storage Facility or activities on the Premises or Bulk Storage Facility.

In the event of a leak, spill, or release of a Hazardous Substance on the Premises or Bulk Storage Facility (or the threat of or reasonable suspicion of same) caused by Hall-Buck, its agents, employees or other persons or entities acting on its behalf, Hall-Buck shall immediately undertake all emergency response necessary to contain, clean up, and remove the Hazardous Substance. Furthermore, Hall-Buck shall within a reasonable time undertake all investigatory, remedial and/or removal action necessary or appropriate to ensure that any contamination by the Hazardous Substance is eliminated.

In the event the Port determines upon inspection that the remedial and/or removal actions taken by Hall-Buck pursuant to this section do not eliminate the contamination, the Port shall give Hall-Buck notice of same and an opportunity to cure any deficiencies noted by the Port during its inspection and a time within which the cure shall be completed. In the event that the Port determines thereafter that Hall-Buck's efforts have still failed to eliminate the contamination, the Port reserves the right to have a contractor of its choosing perform such further remedial and/or removal actions necessary to eliminate the contamination, the cost of which shall be borne by Hall-Buck.

ARTICLE 15 - PORT OBLIGATIONS

The following shall be added as the second sentence of the first paragraph of Section 5.4 of the Terminal Lease:

The Port shall maintain the outdoor yard areas, including the catch basins and rail trackage within the Premises.

ARTICLE 16 - INDEMNIFICATION, INSURANCE, DAMAGE AND DESTRUCTION

Section 6.1 of the Terminal Lease shall be deleted in its entirety and the following substituted:

6.1 Hall-Buck covenants and agrees to indemnify, save and hold harmless, the Port, its commissioners, directors, officers, agents, and employees from and against any and all actual or potential liability claims, demands, damages, expenses, fees (including attorneys', accountants', and paralegal fees), fines, penalties, suits, proceedings, actions, and causes of action (collectively "Costs") which may be imposed upon or incurred by the Port due to the acts or omissions of Hall-Buck or the acts or omissions of any person or entity acting at Hall-Buck's request, at Hall-Buck's direction or on behalf of Hall-Buck (excluding only the negligence or other fault of the Port), and which: (1) arise from or are in any way connected with Hall-Buck's use, occupation, management or control of the Premises whether or not occurring on the Premises; or (2) results from any breach, violation, or nonperformance by Hall-Buck of any of its obligations under this Amendment.

6.1.1 In addition to the indemnity provided in Section 6.1 above, Hall-Buck agrees to indemnify, hold harmless, and defend the Port from and against all Costs (as defined below) incurred by the Port or assessed against the Port under Environmental Laws (as defined below) which arise as a result of Hall-Buck's activities or those of any person or entity acting at the request, direction or behalf of Hall-Buck. As used in this Section 6.2:

(a) "Costs" shall include, but not be limited to: (i) all claims of third parties, including governmental agencies, for damages, response costs, or other relief; (ii) the cost, expense or loss to the Port of any injunctive relief, including preliminary or temporary injunctive relief, applicable to the Port or the Premises; (iii) all expenses of evaluation, testing, analysis relating to Hazardous Substances, including fees of attorneys, engineers, consultants, paralegals and experts; (iv) all expenses of reporting the existence of Hazardous Substances to any agency of the State of Oregon or the United States as required by applicable Environmental Laws; (v) any and all expenses or obligations, including attorneys' and paralegal fees, incurred at, before, and after any trial or appeal therefrom or any administrative proceeding or appeal therefrom whether or not taxable as costs, including, without limitation, attorneys'

and paralegal fees, witness fees (expert and otherwise), deposition costs, copying and telephone charges and other expenses; and (vi) any damages, costs, liabilities and expenses which are claimed to be owed by any federal or state regulating and administering agency.

(b) "Environmental Laws" shall be interpreted in the broadest sense to include any and all federal, state, and local statutes, regulations, rules, and ordinances now or hereafter in effect, as the same may be amended from time to time, which govern Hazardous Substances (as defined below) or relate to the protection of human health, safety or the environment, including but not limited to, the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. §6901 et seq.); the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601, et seq.); the Toxic Substances Control Act (15 U.S.C. §2601, et seq.); Superfund Amendment and Reauthorization Act of 1986 (SARA) (P.L. 99-499, October 17, 1986); the Solid Waste Disposal Act (42 U.S.C. 3251, et seq.); the Federal Insecticide, Fungicide and Rodenticide Act/Pesticide Act (7 U.S.C. §13 et seq.); the Safe Drinking Water Act (44 U.S.C. §300(f) et seq.); the Clean Air Act (42 U.S.C. §7401 et seq.); the Federal Water Pollution Control Act/Clean Water Act (33 U.S.C. §1251 et seq.); the Oil Pollution Control Act of 1990 (33 U.S.C. §2761 et seq.); the Oregon Revised Statutes relating to community information on hazardous waste reduction (ORS 453.307 et seq.); toxic use reduction and hazardous waste reduction (ORS 465.003 et seq.); environmental cleanup of hazardous substances, hazardous wastes, and oil contamination (ORS 465.200 et seq.); notice of environmental hazards (ORS 466.360 et seq.); treatment storage, and disposal of hazardous waste and PCBs (ORS 466.005 et seq.); use of PCBs (ORS 466.505 et seq.); spill response and cleanup of hazardous materials and oil (ORS 466.605 et seq.); underground storage tanks (ORS 466.705 et seq.); penalties for noncompliance (ORS 466.880 et seq.); water pollution control (ORS 468.691 et seq.); oil spills (ORS 468.780 et seq.); asbestos abatement (ORS 468.875 et seq.); any similar or equivalent laws; and any implementing laws, regulations, rules, and ordinances.

(c) "Hazardous Substances" shall be interpreted in the broadest sense to include any substances, materials, wastes, pollutants, oils, or regulated substances, or contaminants as are defined or designated as hazardous, toxic, radioactive, dangerous, or any other similar term in or under any of the Environmental Laws, and shall specifically include asbestos and asbestos-containing materials, petroleum products, including crude oil or any fraction thereof, and

urea formaldehyde, and any other substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or threaten a present or potential hazard to human health or the environment when improperly generated, used, stored, handled, treated, discharged, disposed of, or released.

Promptly upon written notice from the Port or from any governmental entity, Hall-Buck shall remove from the Premises or Bulk Storage Facility (including without limitation the soil or water table thereof), at its own cost and expense, all Hazardous Substances for which Hall-Buck is liable under the terms of this Amendment, and shall restore the Premises, Bulk Storage Facility and adjacent slips and waterways to clean, safe, good, and serviceable condition. Any such cleanup shall be in conformance with all applicable governmental rules and regulations. Any costs incurred by or assessed against the Port shall be paid by Hall-Buck promptly after the Port incurs the obligation to pay such amounts or determines that an assessment is duly owing and so notifies Hall-Buck. As used in this Paragraph, "Premises or Bulk Storage Facility" shall be deemed to include the soil and water table thereof, as well as the adjacent waterways and slips.

The Port will, to the extent permitted by law, hold harmless, defend and indemnify Hall-Buck and its officers, agents, and employees against all claims, demands, actions and suits (including attorney fees and costs) brought against any of them arising from the Port's, its employees' or agents' performance under this Agreement.

Furthermore, the Port agrees, to the extent permitted by law, to indemnify hold harmless, and defend Hall-Buck from and against all Costs (as defined above) incurred by Hall-Buck or assessed it under Environmental Laws (as defined above) which arise as a result of the Port's activities or those of its employees or agents at the Premises or which precede Hall-Buck's occupancy thereof.

Section 6.2 of the Terminal Lease shall be deleted in its entirety and the following substituted:

6.2 During construction of the Bulk Storage Facility, Hall-Buck shall obtain and maintain for the benefit of the Port and Hall-Buck, all-risk Builder's Risk insurance to the extent of 100 percent of the value of the Bulk

Storage Facility project. Coverage shall also include: (1) form-work in place; (2) form lumber on site; (3) temporary structures; (4) equipment; and (5) supplies related to the work while at the site. Such insurance shall be endorsed to require thirty (30) days' written notice to the Port prior to cancellation or change of the policy. One copy of the policy and two certificates of such insurance shall be delivered to the Port before commencing work and shall be subject to review and approval by the Port. The Port may temporarily waive delivery of the copy of the policy, but such waiver shall not forfeit the Port's right to a copy of the policy. In the event Hall-Buck fails to maintain such insurance, the Port may arrange therefor and any premium incurred shall be to the account of Hall-Buck.

Hall-Buck shall maintain an occurrence form commercial general and automobile liability insurance policy or policies for the protection of Hall-Buck and the Port, its commissioners, directors, officers, servants, and employees, insuring Hall-Buck and the Port against liability for damages because of personal injury, bodily injury, death, or damage to property, including loss of use thereof, and occurring on or in any way related to the Premises or occasioned by reason of the operations of Hall-Buck on or from the Premises with insurance of not less than \$5,000,000 combined single limit.

Hall-Buck shall keep the Premises and Bulk Storage Facility and any and all Improvements placed therein continuously insured with an insurance underwriter(s) satisfactory to the Port and authorized to do business in the State of Oregon. The policy(ies) shall be written on an all risk form including flood and earthquake in an amount equal to 90 percent of the new replacement value of the Improvements on the Premises.

Hall-Buck shall maintain in force Workers' Compensation insurance, including coverage for Employer's Liability and, if applicable, the Longshoremen's and Harbor Workers' Compensation Act.

All insurance shall name the Port, its Commissioners, officers, and employees as additional insureds with the stipulation that this insurance, as to the interest of the Port only therein, shall not be invalidated by any act or neglect or breach of contract by Hall-Buck.

All certificates of insurance provided the Port shall, at a minimum, evidence the date, amount, and type of insurance that has been procured. All policies of insurance except for the all-risk Builder's Risk insurance shall remain in full force during the term of the Terminal Lease, this Amendment and any extensions thereof and shall provide for not less than thirty days' written notice to the Port and Hall-Buck before such policies may be revised, non-renewed, or canceled. Upon request, Hall-Buck shall provide the Port with a copy or copies of any insurance policy required pursuant to this Amendment.

The Port shall have the right to periodically review the limits of insurance required and, in the event the Port determines using standards generally employed in the insurance industry for the assessment of businesses engaged in commercial enterprises akin to that of Hall-Buck that such limits should be increased or lowered, the Port will provide notice to Hall-Buck of such determination and Hall-Buck shall, if the limits are increased, modify its coverage to comply with the new limits and provide the Port with an updated certificate.

Except as otherwise provided in this Amendment, if during the term of the Terminal Lease or Amendment, the Premises or Bulk Storage Facility is totally or partially destroyed by fire or any other cause, Hall-Buck shall immediately notify the Port in writing generally describing such damage and destruction including the time of occurrence. In addition, Hall-Buck shall apply all insurance proceeds received in relation to such damage or destruction to the restoration, repair or rebuilding (collectively "Restoration") of the Premises and the Bulk Storage Facility, but Hall-Buck shall not be required to pay for such damage or destruction at its own expense, except in the event that Hall-Buck is responsible for causing or contributing to the loss of or voiding of the insurance policy(ies) covering said damage or destruction.. Such damage or destruction shall not terminate or abate the payments due to the Port pursuant to Article 5 of this Amendment. If existing laws do not permit Restoration, either party can terminate the Terminal Lease or this Amendment immediately by giving written notice to the other party.

ARTICLE 17 -- DEFAULT

Section 7.2 of the Terminal Lease shall be deleted in its entirety and the following substituted:

7.2 In the event of a default pursuant to the terms of Article VII of the Terminal Lease, and in addition to the remedies provided therein, the Port at its option, may exercise any other remedies available to it under law or equity. Any notice to terminate by the Port may be given before or within the grace period for default and may be included in a notice of failure of compliance.

Suit(s) or action(s) for the recovery of the rents and other amounts and damages or for the recovery of possession may be brought by the Port from time to time, at the Port's election and nothing in this Amendment will be deemed to require the Port to await the date on which either the Terminal Lease or this Amendment expires.

The rent owed to the Port for the remainder of the term shall be the Minimum Guarantee as that term is defined in Section 3.2 of this Amendment at the rates set out for soda ash in Section 3.3 (A) and (B) of this Amendment multiplied by the number of remaining lease years in the Terminal Lease and this Amendment.

Each right and remedy available to the Port pursuant to this Amendment will be cumulative and includes, in addition to every other right or remedy existing at law or in equity (by statute or otherwise), suits for injunctive relief and specific performance. Furthermore, the exercise or beginning of the exercise by the Port of any such rights or remedies will not preclude the simultaneous or later exercise by the Port of any other such rights or remedies. All such rights and remedies are nonexclusive.

ARTICLE 18 - COMPLIANCE WITH LAWS

The following shall be added as the last sentence to Section 9.8 of the Terminal Lease:

Hall-Buck shall promptly provide to the Port copies of all notices or other communications between Hall-Buck and any governmental entity which relate to Hall-Buck's noncompliance or alleged noncompliance with any law, ordinance, regulation, condition, or other applicable requirement lawfully imposed by any agency, governmental body, or quasi-governmental body having jurisdiction over Hall-Buck's use of the Premises.

ARTICLE 19

The following shall be added as Sections 9.15, 9.16 and 9.17 to the Terminal Lease:

9.15 The Port and Hall-Buck are the only parties to this Terminal Lease and as such are the only parties entitled to enforce its terms. Nothing in this Terminal Lease gives or shall be construed to give or provide any benefit, direct, indirect, or otherwise to third parties unless third persons are expressly described as intended to be beneficiaries of its terms.

9.16 Hall-Buck understands that the Port is bound by the terms of the Consent Decree entered in May, 1993 in the case of United States of America, et. al. v. Port of Portland, U.S.D.C. No. CV 93-267RE which requires the Port to permanently cease the discharge of pencil pitch into the waters of the United States, including the Willamette River, and to perform certain other remedial actions designed to remove pencil pitch from the river floor in areas around and adjacent to Terminal Four. Hall-Buck hereby acknowledges that it has received a complete copy of the Consent Decree and is familiar with its terms and especially the Port's responsibility to perform remedial dredging work in and around the slip adjacent to Berths 410, 411 and 412.

Hall-Buck further understands that compliance with the terms of the Consent decree by the Port will necessitate interruption of the use of Terminal Four as a result of dredging activities for certain periods over the course of the Term of the Terminal Agreement. Provided such interruptions occur within the time frames specified below, Hall-Buck on behalf of itself, its officers, employees, agents and assigns hereby releases, covenants not to sue and discharges the Port of Portland, its Commissioners, officers, directors, managers,

employees, agents, insurers and all other related entities (hereinafter collectively called the Port) from liability or claims that it may have now or in the future as to 'loss of use' or 'lost profit' damages arising out of the interruption of Hall-Buck's business at Terminal Four as a result of the Port's performance of any of its responsibilities under the terms of the Consent Decree.

Hall-Buck's release in this section is expressly conditioned on the Port performing its remedial dredging activities associated with its compliance with the terms of the Consent Decree in the slip adjacent to Berths 410, 411 and 412 according to the following:

During the years 1994 through 1997, the Port shall have two (2) periods of time within which it can interrupt Hall-Buck's operation to perform remedial dredging activities, the first being twenty-one (21) days and the second being fourteen (14) days in duration. There will be a minimum of fourteen (14) days between the two dredging periods. The determination of the particular months in which the remedial dredging will be conducted shall be at the Port's reasonable discretion, given the regulatory requirements within which such dredging activity may occur, except that the month of December will be excluded. The Port will coordinate with Hall-Buck as to actual dates on which the dredging periods will commence.

9.17

In the event the Port encounters a condition, event or activity which it believes affects its ability to perform the remedial dredging activities within the time periods or intervals set out in Section 9.16, it shall promptly give Hall-Buck notice of that fact. Thereafter, both the Port and Hall-Buck shall hold discussions to identify what additional time periods the Port may need to conduct further remediation dredging as well as what further actions, if any, the Port should take to effect the necessary remediation. The Port and Hall-Buck understand that dredging beyond that specified in 9.16 or such other further actions agreed to by the parties to effect the remediation will be done in a manner and at a time designed to minimize the impact of that remediation activity on normal vessel loading and/or unloading activity by Hall-Buck.

ARTICLE 20 - EFFECTIVE DATE

The effective date of this Amendment shall be November 24, 1993
("Effective Date").

ARTICLE 21

OTHER PROVISIONS OF THE TERMINAL LEASE APPLICABLE TO THE BULK
STORAGE FACILITY

Unless a provision of the Terminal Lease is specifically replaced
with a provision in this Amendment, all provisions of the Terminal
Lease shall apply to the Bulk Storage Facility. However the term
Facility as defined in the Terminal Lease and as used therein shall
not be understood to include the Bulk Storage Facility.

ARTICLE 22 - TERMINAL LEASE TO REMAIN IN EFFECT

Except as modified by this Amendment, the Terminal Lease shall
remain in full force and effect.

HALL-BUCK MARINE, INC.

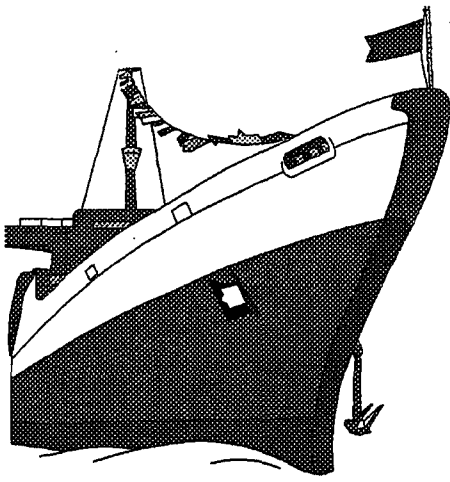
THE PORT OF PORTLAND

By Thomas B. Stanley
Title President

By Paul E. Elmer
Title _____

APPROVED AS TO LEGAL SUFFICIENCY

Paul E. Elmer
Counsel, Port of Portland



HALL~BUCK MARINE, INC.

11404 N. LOMBARD

TERMINAL 4, PIER 4

PORTLAND, OR 97203

PHONE: (503) 285-2990 FAX: (503) 285-4467

TO: Clarke Williams

AT: Sorrent

FAX: (504) 675-5923

FROM: Brad

RE: PoP lease adjustment

DATE: 6-13-97

PAGES INCLUDING COVER: 3

MESSAGE: following 6-10-97 letter T4 lease #87-109



Port of Portland

Box 3529, Portland, Oregon 97208
503/231-5000

June 10, 1997

Clarke Williams
Vice President Finance
Hall-Buck Marine, Inc.
P.O. Box 625
Sorrento, LA 70778

RE: T-4 Facility Lease - Port Lease #87-109

Dear Clarke:

Per Amendment No. 1 of your lease agreement for outbound bulks at the facilities at the Port's Marine Terminal 4, the following adjustments to the throughput charges are to be made each July 1. Calculations are as follows:

Soda Ash Throughput rates:

Original throughput rates

0 - 500,000 tons	\$.76/ton
500,001 - 1,500,000 tons	\$.66/ton
Over 1,500,000 tons	\$.25/ton

Throughput rates effective 7/1/97

0 - 500,000 tons	\$.85/ton
500,001 - 1,500,000 tons	\$.74/ton
Over 1,500,000 tons	\$.28/ton

All soda ash loaded for ANSAC is subject to a \$0.28/ton throughput charge with a minimum and maximum annual guarantee payment of \$385,000, July 1 through June 30, per the letter from Fay Malloy dated June 17, 1996.

Clark Williams
June 10, 1997
Page 2

All Other Commodities Throughput Charges

December 1996 CPI	158.60
December 1992 CPI	141.90

Percent Change	11.8%
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Original throughput rates

0 - 500,000 tons	\$.78/ton
Over 500,000 tons	\$.68/ton

Throughput rates effective 7/1/97

0 - 500,000 tons	\$.87/ton
Over 500,000 tons	\$.76/ton

In addition, Hall-Buck guarantees to the Port a minimum annual guarantee of 1,000,000 metric tons of all commodities combined between July 1 and June 30 of each year.

Please give me a call if you have any questions.

Sincerely,



Alice Patten
Administrative Coordinator
Marine Contracts

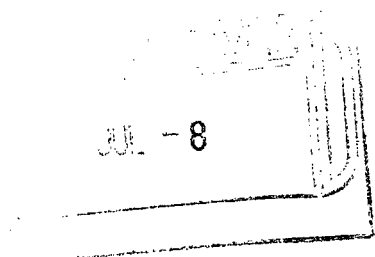
cc: Brad Clinefelter
Kevin Jones
Sharen Hutcheson



Port of Portland

Box 3529, Portland, Oregon 97208, U.S.A.
503/231-5000

July 6, 1999



Tom Stanley, President
Kinder Morgan Bulk Terminals
P.O. Box 625
Sorrento, LA 70778

RE: T-4 Facility Lease - Port Lease #87-109

Dear Tom:

Per your phone call of July 6, I have modified the rates that would have been effective July 1, 2000, had the discount not been in place. I apologize for this confusion, and as I explained, for this calculation, I used the 15.5% escalation factor against the original rates. Next year, we will escalate these rates based on one year's CPI-U change, from December 1998 to December 1999. The rates should have been as follows:

Soda Ash Throughput rates:

Effective 7/1/99 - 6/30/00

0 - 500,000 tons	\$.75/ton
500,001 - 1,500,000 tons	\$.64/ton
Over 1,500,000 tons	\$.25/ton

Effective 7/1/00 to be Escalated

0 - 500,000 tons	\$.88/ton
500,001 - 1,500,000 tons	\$.76/ton
Over 1,500,000 tons	\$.29/ton

All other commodities are to be escalated July 1 each year based on the change in the CPI-U index. Calculations are as follows:

December 1998 CPI	163.90
December 1992 CPI	<u>141.90</u>
Percent Change	15.5%

Original Throughput Rates

0 - 500,000 tons	\$.78/ton
Over 500,000 tons	\$.68/ton

Throughput Rates Effective 7/1/99

0 - 500,000 tons	\$.90/ton
Over 500,000 tons	\$.79/ton

Beginning July 1, 2000, the beginning index for escalation purposes will be December 1998 which is 163.90.

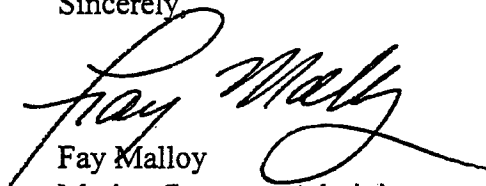
The ANSAC surcharge rate of \$0.28/ton has been fully satisfied and will no longer be applied to any cargo.

Tom Stanley
July 6, 1999
Page 2

The Minimum Annual Guarantee was changed from a tonnage calculation to a dollar amount. The Minimum Annual Guarantee Rent for Contract Year 7/1/99 - 6/30/00 is \$850,000, which will be adjusted each July 1 beginning July 1, 2000, by the increase in the CPI-U per Section 3.4.

Please give me a call if you have any questions.

Sincerely



Fay Malloy
Marine Contracts Administrator

cc: Brad Clinefelter
Kevin Jones
Clarke Williams
Laura Lum



Kinder Morgan Bulk Terminals, Inc.

March 1, 1999

Via Fax: 240-2009

Mrs. Fay Malloy
PO Box 3529
Portland, Or. 97208

Re: Option on Lease #87-109

Dear Fay,

On behalf of Kinder Morgan Bulk Terminals, Inc., I am once again requesting an extension to our deadline to exercise the five-year option in the aforementioned lease. The final details in our contract negotiations with Ansac should be concluded shortly. Therefore, we are requesting that the Port grant another extension through March 12, 1999.

I trust you'll find this request reasonable and will grant our request.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kevin T. Jones', is written over a horizontal line.

Kevin T. Jones
NW Regional Manager
Kinder Morgan Bulk Terminals, Inc.

Cc: file Port of Portland
Thomas Stanley
Brad Clinefelter T-4

**Port of Portland****FAX**

(503) 240-2013 (voice)

(503) 240-2009 (fax)

To: Kevin Jones
Kinder Morgan Bulk Terminals, Inc.
FAX #285-7733

Date: February 5, 1999

CC: Thomas Stanley (504-675-5923)
Brad CLinefelter, T-4 (285-4467)
Bob Hrdlicka
John Hachey

From: Fay Malloy

Pages 1

Re: OPTION TIMEFRAME EXTENSION, PORT LEASE #87-109

Per this FAX, the Port of Portland grants Kinder Morgan Bulk Terminals, Inc., an extension of your timeframe to notify the Port of your intention to take your next option to February 26, 1999. We look forward to discussing any issues you may have regarding this facility.



Kinder Morgan Bulk Terminals, Inc.

February 2, 1999

Via Fax: 240-2009

Ms. Fay Malloy
PO Box 3529
Portland, Oregon 97208

Re: Option on Lease #87-109

Dear Fay,

Pursuant to our phone conversation today, Kinder Morgan Bulk Terminals, Inc. requests that the Port of Portland extend our deadline to exercise the five-year option in the aforementioned lease. As you already know we are working out the details of this extension with ANSAC, our mutual customer.

We ask that you consider providing Kinder Morgan Bulk Terminals, Inc. until February 26, 1999 to complete these negotiations and exercise our option.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kevin T. Jones', is written over the typed name.

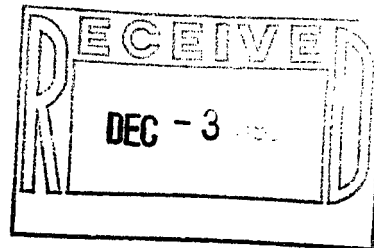
Kevin T. Jones
NW Regional Manager
Kinder Morgan Bulk Terminals, Inc.

Cc: Thomas Stanley
Brad Clinefelter T-4



Port of Portland

Box 3529, Portland, Oregon 97208, U.S.A.
503/231-5000



December 1, 1998

VIA FAX: 504-675-5923

Tom Stanley
Kinder Morgan Terminals
7116 Highway 22
PO Box 625
Sorrento, LA 70778-0625

RE: OPTION ON PORT LEASE #87-109

Dear Tom:

Your lease at Terminal 4 expires June 30, 1999 with a five-year option through June 30, 2004. The option requires 180-days written notice, which means if you wish to exercise this option we need to hear from you by December 31, 1998.

You can call me toll-free at 1-800-547-8411, ext. 2011, or Fay Malloy at ext. 2013, if you have any questions or concerns. Our fax number is 503-240-2009. We look forward to hearing from you soon.

Sincerely,

Alice Patten
Contracts Administrator
Marine Division

cc: Don Grigg
✓ Brad Clinefelter
Kevin Jones



Port of Portland

Box 3529, Portland, Oregon 97208
503/231-5000

June 9, 1998

Clarke Williams
Vice President Finance
Hall-Buck Marine, Inc.
P.O. Box 625
Sorrento, LA 70778

RE: T-4 Facility Lease - Port Lease #87-109

Dear Clarke:

This is a correction to the letter I sent June 5. Please note the effective date for rate increase is July 1, 1998.

Per Amendment No. 1 of your lease agreement for outbound bulks at the facility at the Port's Marine Terminal 4, the following adjustments to the throughput charges are to be made each July 1 based on the change in the CPI-U index. Calculations are as follows:

December 1997 CPI	161.30
December 1992 CPI	141.90
Percent Change	13.7%

Soda Ash Throughput rates:

Original throughput rates

0 - 500,000 tons	\$.76/ton
500,001 - 1,500,000 tons	\$.66/ton
Over 1,500,000 tons	\$.25/ton

Throughput rates effective 7/1/98

0 - 500,000 tons	\$.86/ton
500,001 - 1,500,000 tons	\$.75/ton
Over 1,500,000 tons	\$.28/ton

Clark Williams
June 9, 1998
Page 2

All Other Commodities Throughput Charges

Original throughput rates
0 - 500,000 tons \$.78/ton
Over 500,000 tons \$.68/ton

Throughput rates effective 7/1/98
0 - 500,000 tons \$.89/ton
Over 500,000 tons \$.77/ton

In addition, Hall-Buck guarantees to the Port a minimum annual guarantee of 1,000,000 metric tons of all commodities combined between July 1 and June 30 of each year.

Please give me a call if you have any questions.

Sincerely,



Alice Patten
Administrative Coordinator
Marine Contracts

cc: Brad Clinefelter
Kevin Jones
Sharen Hutcheson



Port of Portland

Box 3529, Portland, Oregon 97208
503/231-5000

June 5, 1998

Clarke Williams
Vice President Finance
Hall-Buck Marine, Inc.
P.O. Box 625
Sorrento, LA 70778

RE: T-4 Facility Lease - Port Lease #87-109

Dear Clarke:

Per Amendment No. 1 of your lease agreement for outbound bulks at the facility at the Port's Marine Terminal 4, the following adjustments to the throughput charges are to be made each July 1 based on the change in the CPI-U index. Calculations are as follows:

December 1997 CPI	161.30
December 1992 CPI	141.90
Percent Change	13.7%

Soda Ash Throughput rates:

Original throughput rates	
0 - 500,000 tons	\$.76/ton
500,001 - 1,500,000 tons	\$.66/ton
Over 1,500,000 tons	\$.25/ton

Throughput rates effective 7/1/97	
0 - 500,000 tons	\$.86/ton
500,001 - 1,500,000 tons	\$.75/ton
Over 1,500,000 tons	\$.28/ton

All soda ash loaded for ANSAC is subject to a \$0.28/ton throughput charge with a minimum and maximum annual guarantee payment of \$385,000, July 1 through June 30, per the letter from Fay Malloy dated June 17, 1996.

Clark Williams
June 5, 1998
Page 2

All Other Commodities Throughput Charges

Original throughput rates

0 - 500,000 tons	\$.78/ton
Over 500,000 tons	\$.68/ton

Throughput rates effective 7/1/98

0 - 500,000 tons	\$.89/ton
Over 500,000 tons	\$.77/ton

In addition, Hall-Buck guarantees to the Port a minimum annual guarantee of 1,000,000 metric tons of all commodities combined between July 1 and June 30 of each year.

Please give me a call if you have any questions.

Sincerely,



Alice Patten
Administrative Coordinator
Marine Contracts

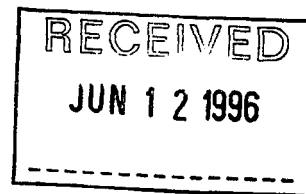
cc: ✓ Brad Clinefelter
Kevin Jones
Sharen Hutcheson



Port of Portland

Box 3529, Portland, Oregon 97208
503/231-5000

June 11, 1996



Clarke Williams
Vice President Finance
Hall-Buck Marine, Inc.
P.O. Box 625
Sorrento, LA 70778-0625

Dear Clarke:

RE: LEASE AGREEMENT NO. 87-109

Per Amendment No. 1 of your lease agreement for outbound bulks at the facilities at the Port's Marine Terminal 4, the following adjustments to the throughput charges are to be made each July 1. The calculations are as follows:

All Other Commodities Throughput Charges

December 1995 CPI	153.5
December 1992 CPI	141.9
Percent Change	8.1%
Original throughput rates	
0 - 500,000 tons	\$.78/ton
Over 500,000 tons	\$.68/ton
Throughput rates effective 7/1/96	
0 - 500,000 tons	\$.84/ton
Over 500,000 tons	\$.74/ton

Clarke Williams
June 11, 1996
Page 2

Soda ash throughput charges will change as follows:

Original throughput rates	
0 - 500,000 tons	\$.76/ton
500,001 - 1,500,000 tons	\$.66/ton
Over 1,500,000 tons	\$.25/ton

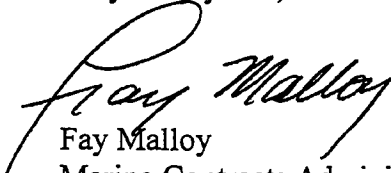
Throughput rates effective 7/1/96	
0 - 500,000 tons	\$.82/ton
500,001 - 1,500,000 tons	\$.71/ton
Over 1,500,000 tons	\$.27/ton

As previously agreed to, all soda ash loaded for ANSAC is subject to a \$0.28/ton throughput charge with a minimum and maximum annual guarantee payment of \$385,000, for the year January 1 through December 31.

In addition, Hall-Buck guarantees to the Port a minimum annual guarantee of 1,000,000 metric tons of all commodities combined between July 1 and June 30 of each year.

Please give me a call if you have any questions.

Very truly yours,



Fay Malloy
Marine Contracts Administrator

cc: Brad Clinefelter
Kevin Jones
Sharon Hutcheson



Port of Portland

Box 3529, Portland, Oregon 97208
503/231-5000

June 10, 1996

Clarke Williams
Vice President Finance
Hall-Buck Marine, Inc.
P.O. Box 625
Sorrento, LA 70778

RE: Lease No. 88-047

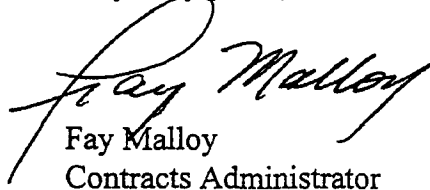
Dear Clarke:

Per your equipment lease for inbound bulks using the Dravo crane at the Port's Marine Terminal 4, the throughput rate on tonnage in excess of 25,000 tons per year is to be adjusted annually based on the comparison of the CPI from March 1988 with the CPI of last December. The calculations are as follows:

March 1988 CPI	116.5
December 1995 CPI	153.50
Percent Change	31.8%
Throughput Rate > 25,000 tons	
Original throughput rate	\$1.00/ton
Throughput rate effective 6/15/96	\$1.32/ton

Please give me a call if you have any questions.

Very truly yours,


Fay Malloy
Contracts Administrator

cc: Brad Clinefelter
Kevin Jones
Sharon Hutcheson



Port of Portland

Box 3529, Portland, Oregon 97208
503/231-5000

February 3, 1995

Mr. Clarke Williams
Vice President, Finance
Hall-Buck Marine, Inc.
P.O. Box 35
Burnside, LA 70738

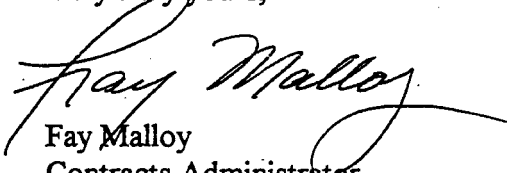
Dear Clarke:

Per our conversation today, the Port will change the way we perform invoicing for your lease at Terminal 4. Beginning with the February billing, the Port will issue an invoice for you to pay off of rather than Hall-Buck sending a check with the month's recap. In this way, any discrepancies will be handled prior to a check being cut.

We understand your need to have the invoice promptly and will work with you to make sure we are within your time frame. We can fax a copy of the invoice prior to mailing to give you a head start on processing. Our standard invoicing procedure is to have all invoices prepared by the fifth working day of the month. If this doesn't work, we can always go back to the current practice. If it does work, I'd like to set up the Terminal 5 lease this way as well.

Please call me at 1-800-547-8411, ext. 2013 or 503-240-2013 if you want to discuss this further.

Very truly yours,


Fay Malloy
Contracts Administrator

cc: Brad Clinefelter, Hall-Buck Portland
Sharon Hutcheson

FEB 6 1995



Kinder Morgan Bulk Terminals, Inc.

Terminal 4, Pier 4
11040 N. Lombard
Portland, Oregon 97203
P.O. Box 83838
Portland, Oregon 97283

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NW Pump & Equipment Testing Results	5/12/08
Corrosion Control Specialists UST Cathodic Protection Data Sheet	11/15/06
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Mascott Equipment Results of Line Test & Leak Detector	7/19/05
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Data Reports	
Corrosion Control Specialists UST Cathodic protection Data Sheet	12/8/00
Corrosion Control Specialists Cathodic Protection Data Sheet	1/5/98
Kinder Morgan Bulk Terminals Environmental Compliance	2/14/11
Procedures & Guidelines	
Kinder Morgan Bulk Terminals Accidental Spill Prevention Plan	revised 1/26/11
Kinder Morgan Bulk Terminals Best Management Practices	updated 2/17/11
Kinder Morgan Bulk Terminals Dust Control Operation &	reviewed
Maintenance Plan	3/29/10
Kinder Morgan Bulk Terminals Hazard Communication Program	revised 5/19/10
DEQ National Pollutant Discharge Elimination System Permit	6/8/07
City of Portland Environmental Services Wasterwater Discharge	effective 9/2/10
Permit	
Kinder Morgan Bulk Terminals DEQ Air Contaminant Discharge	2/12/11
Permit #26-2909 Annual Report	



State of Oregon
Department of
Environmental
Quality

**CERTIFICATE TO OPERATE
UNDERGROUND STORAGE TANKS
REGISTRATION CERTIFICATE NUMBER**

26-9786-2010-OPER

FACILITY NAME AND LOCATION

KINDER MORGAN BULK TERMINAL
11040 N LOMBARD ST
PORTLAND, OR 97203

PERMITTEE

Kinder Morgan Bulk Terminals,
Inc.
PO Box 83838
Portland, OR 97283

TANK PERMIT:

AJBBH

TANK ID NO:

1

TANK SIZE:

5,000 GALLONS

TANK CONTENTS:

DIESEL

CERTIFICATE EXPIRES: June 30, 2011

ISSUE DATE: 06/09/2010

DEQSQL1\PROD

Andree Pollock
UST Program Manager
Land Quality Division

Post this certificate where it is visible to the person delivering fuel.

Rev. 20100510

Northwest Pump and Equipment Co.

2010 Testing Results

Attn: Bruce Craven

**Kinder Morgan Bulk Terminals
Terminal 4
11040 N Lombard
Portland, OR 97203**

Testing Results must be kept onsite for Regulatory Inspections

**Janeene Norris – Compliance Testing Manager
(503)205-2117 or (866)405-2117
Brian Clark – Testing Assistant/Dispatch Supervisor
(503)205-2128 or (877)305-2128**

NW PumpTank Monitor and Site Assessment Form

Customer Information

Site Name KINDER MORGAN BULK TERMINALS Date May 3, 2010
 Address 11040 N LOMBARD St TERMINAL 4 Technicians Name C A FINGER
 City, State, Zip PORTLAND OR 97203 Technicians Signature C. A. Finger

Tank Monitor Make	PNEUMERCATOR		
Monitor Model	LC002		
Monitor S/N	E26785		Comments
In-Tank Probe Check	Passing .2 gph test for last 12 months	N/A	ANNULAR FOR TK LEAK DETECTION
Tank #/ID	Probes pulled/cleaned	N/A	
T1 DIESEL	Run system diagnostic check	N/A	
	Probe cables/connections OK	N/A	
	Report printout left onsite	N/A	
	Sensor History Printed	N/A	
Sensor #/ID	Sensor Passed Testing	YES	
ANNULAR SPACE			
LINE CONTAINMENT			
Method of tank leak detection (select) <input type="checkbox"/> SIR <input type="checkbox"/> CSLD <input type="checkbox"/> Timed Test <input checked="" type="checkbox"/> Annular			
Overfill Method (select) <input type="checkbox"/> Alarm <input checked="" type="checkbox"/> Overfill drop tube <input type="checkbox"/> Ball Float			
Method used to check overfill (select) <input checked="" type="checkbox"/> Visual <input type="checkbox"/> Via Probe pull <input type="checkbox"/> Via Console			
			Comments
Site uses a metered fill/nozzle	NO		TEST ARE RECORDED IN LOG
Overfill compatible with metered fill	YES		
Is Cathodic Protection testing required at this site	YES		
Is piping under dispensers clear of earthen material	YES		
Is STP piping clear of earthen material	YES		
Site is keeping monthly required reports (liquid sensor status/cp records)	YES		
Method of line leak detection (select) <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> Electronic <input type="checkbox"/> Safe Suction (confirmed) <input type="checkbox"/> Unsafe Suction (confirmed)			
			Comments
Site has containment at the dispenser	NO		
Site has containment at the STP	NO		
Containment free of water	YES		
Deep sump entry required	NO		
Overfill drain valves checked (operational)	YES		
Impact valves operational (see add'l form if required)	YES		
Visable leaks on hanging hardware	NO		

WO# : 105869

DATE: May 3, 2010

WO# :105869

Page #: 2 of 2



NORTHWEST PUMP & EQUIPMENT CO.

2800 N.W. 31st Avenue

Portland, OR. 97210 866-205-7777

3 GPH MECHANICAL & ELECTRONIC LEAK DETECTOR TEST

SITE NAME: KINDER-MORGAN BULK TERMINALS

TEST DATE: May 3, 2010

ADDRESS: 11040 N. LOMBARD St TERMINAL 4

TECHNICIAN NAME: C. A. FINGER

CITY, ST., ZIP: PORTLAND OR 97203

TECH. SIGNATURE: *C.A. Finger*

PRODUCT: DIESEL

TYPE OF LEAK DETECTOR: RJ XLD

TYPE OF PRODUCT LINE: SWFLEX

3 GPH TEST:

PASS: X

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

X

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:



Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4th Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

FAX (503) 229-6945

TTY (503) 229-5471

November 24, 2009

KINDER MORGAN BULK TERMINALS, INC.

PO BOX 83838
PORTLAND, OR 97283-0838

RE: UST Facility Compliance Notification
DEQ UST Facility 9786
KINDER MORGAN BULK TERMINAL
11040 N LOMBARD ST
PORTLAND, MULTNOMAH County

On 11/24/2009, the Department of Environmental Quality (DEQ) completed an Operation and Maintenance (O&M) inspection at the above referenced facility. The DEQ has determined that the regulated USTs at this facility were being operated **in compliance** with State of Oregon UST requirements on 11/24/2009. The DEQ appreciates your efforts to operate and maintain your UST systems in compliance with Oregon environmental law.

Please remember to conduct service and maintenance inspections and periodic testing at the required intervals and to implement and/or maintain adequate record keeping. You may be asked for these records on a yearly basis. Annual tests must be completed every 12 months on or before the anniversary date of the tank install or the previous test. This letter and an attached facility inspections report, lists equipment currently installed, test dates, and some general recommendations for maintaining UST compliance as follows:

- Monitor tanks and piping for leaks and keep twelve months of monthly and or daily records as necessary for your specific systems.
- Maintain financial responsibility coverage for pollution liability.
- Test cathodic protection systems every three years (if applicable).
- Test product lines and leak detectors annually on or before the previous test (if applicable).
- Monitor fuel delivery records for signs of overfilling to capacity and make corrections to defective overfill prevention equipment or improper delivery procedures as necessary.
- Report a suspected release to the DEQ within 24 hours and begin an investigation when tank or line tests confirm a failed system, when fuel alarms indicate a failed leak test, or when fuel is found in containments.
- Contact your service provider for assistance with testing and alarm investigation, if you suspect fuel loss, equipment is malfunctioning, leak detectors are triggering, or product lines are losing prime.

If you have any questions regarding the inspection or its findings, please contact me. I can be reached at (503) 229-5048 or via e-mail at MCCOY.Bob@deq.state.or.us.

Sincerely,

Bob McCoy
Environmental Specialist

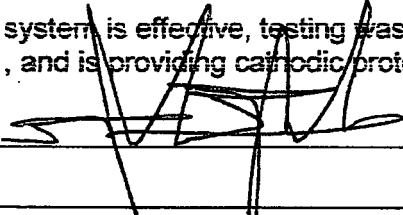
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KMB00000194

Oregon Department of Environmental Quality

Cathodic Protection Test Information Page

UST Owner				UST Facility			
NAME: <u>KINDER MORGAN</u>				NAME:		ID#:	
ADDRESS: <u>11040 N. LOMBARD</u>				ADDRESS:			
CITY: <u>PORTLAND</u>		STATE: <u>OR</u>		CITY:		STATE:	
Cathodic Protection Tester							
TESTER'S NAME: <u>ZACH SATHER</u>				CP TESTER'S LICENSE #: <u>26475</u>			
COMPANY NAME: <u>PACIFIC ENVIRONMENTAL SERVICES</u>				EXPIRATION DATE: <u>3/2010</u>			
ADDRESS: <u>8585 S R 20</u>				PHONE NUMBER: <u>(800) 222-9219</u>			
CITY: <u>PORT TOWNSEND</u>		STATE: <u>WA</u>		NACE CERTIFICATION #:			
Cathodic protection system is: <input checked="" type="checkbox"/> Galvanic <input type="checkbox"/> Impressed current Date Last Tested: <u>4/14/2009</u>							
Weather Conditions at Time of Testing/Inspection: <u>CLEAR COOL</u>							
Temperature: <u>57°F</u> Soil/Backfill Conditions (circle): <u>dry</u> gravel <u>MOIST SAND</u>							
Cathodic Protection System Certification							
Identify which of the following testing situations is being recorded:							
<input checked="" type="checkbox"/> Test required within 6 months of installation of CP system (installation date was <u>4/14/2009</u>) <input checked="" type="checkbox"/> Test required at least every 3 years after installation/test noted above <input type="checkbox"/> Test required within 6 months of any repair activity							
The cathodic protection system is effective, testing was performed according to NACE Standards RP-0285-2002 and TM0101-2001, and is providing cathodic protection to all tanks and product lines: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Signature of Tester 				Date <u>11/23/2009</u>			
UST SYSTEM INFORMATION							
TANK #	YR TANK INSTALLED	CAPACITY	TANK MATERIAL	LINED? Y/N Date	YR CP INSTALLED	PIPING MATERIAL	YR CP INSTALLED
<u>1</u>		<u>5,000</u>	<u>EPOXY COATED STEEL</u>	<u>NO</u>		<u>BORED STEEL</u>	

UST SITE PLAN – On the back draw a diagram showing the important parts of the facility (tanks, lines, manway locations, turbines, vents, rectifier, pump islands, buildings). Indicate reference cell locations where structure-to-soil potential or continuity measurements have been made and label (R-1, R-2, R-3); location of all anodes and wires; location of CP test stations.

Facility Name KINDER MORGAN Test Date 11/23/2009 Facility # 26-9786-2009-DPEN
BULK TERMINAL #4

GALVANIC (SACRIFICIAL) CP TEST RESULTS REPORT PAGE

STRUCTURE TO SOIL POTENTIAL MEASUREMENTS

ID	STRUCTURE	CONTACT POINT	REFERENCE CELL LOCATION	mV	COMMENTS
1	TANK 1	INTERIOR	MANWAY NEXT TO FILL	-957	PASS
2	FILL RISER	FILL RISER	BELT SUPPORT BASE	-457	NOT CONTINUOUS
3	TURBINE	LIFTING EYE	BELT SUPPORT BASE	-312	NOT CONTINUOUS
4	DISPENSER	SHEAR VALVE	BELT SUPPORT BASE	-312	NOT CONTINUOUS

CP TEST STATION REQUIREMENTS

Have previous CP system test records been reviewed?

N/D

Has this CP test been performed consistent with previous CP system tests?

N/A

If test procedures have changed since last test please explain:

Have potential measurements been made at all tanks and piping including any buried flex-connectors?

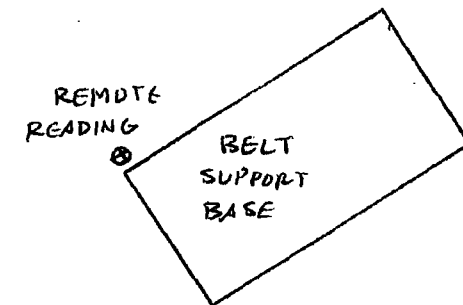
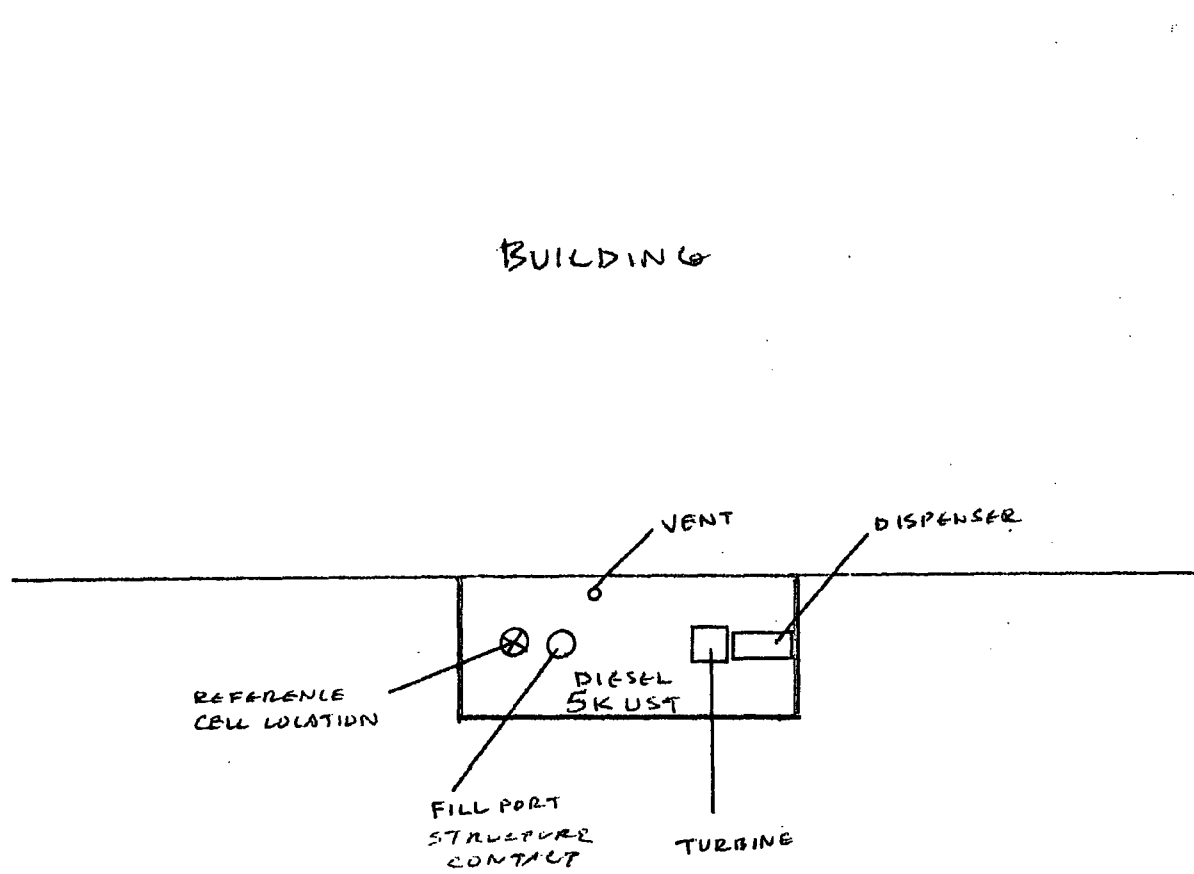
YES

COMPLETE IF ANY REPAIRS OR MODIFICATIONS TO THE CP SYSTEM ARE MADE OR ARE NECESSARY

Describe any repairs or modifications to the cathodic protection system that are made or are necessary.

SYSTEM IS OPERATIONAL AND MEETS NACE STANDARD RP-0285

↑
N



PACIFIC Environmental

SERVICES COMPANY

Invoiced to:
KINDER MORGAN
11040 N. LOMBARD
PORTLAND, OR 97203
ATTN: BRUCE CRAVEN

NOVEMBER 30, 2009
JOB #95912-0
CUST #KIN03
INVOICE #17656

JOB SITE: 11040 N. LOMBARD - PORTLAND, OR.

**INVOICING FOR 100% COMPLETION OF THE 3 YEAR CATHODIC PROTECTION
OPERATIONAL CHECK AT THE ABOVE REFERENCED JOB SITE WITH
DEPT. OF ECOLOGY CHECKLIST & REPORT. TEST DATE - 11/23/09**

PROJECT AMOUNT

550.00

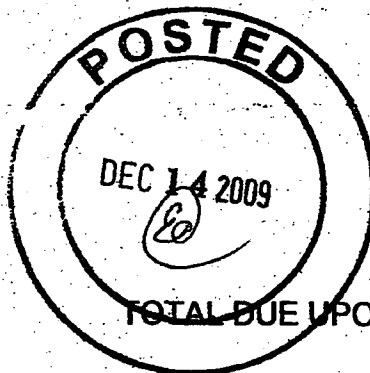
INVOICE AMOUNT

550.00

W.S.S.T. @ N/A - SERVICE

TOTAL AMOUNT DUE THIS INVOICE

\$ 550.00



04350016	6402	730115	5800	
ANJ	RC	ASE	TOC	
Activity	Sub	Phase	Task	Prop Unit
U1ST LICENSING			SSO	2
Description		Amount		
102.40		12/11/09		
Approver IL		Date		
Approval		351		

THANK YOU

PLEASE REMIT TO:
PESCO

P.O. BOX 2049

PORT TOWNSEND, WA 98368

Voucher # 5513499

Vendor # 100109762

J#95912

(FOREIGN SALE) PT

UST SPECIALISTS

8585 Highway 20
13022 W. 18th Ave

P.O. Box 2049
P.O. Box 639

Port Townsend, WA 98368-0239
Airway Heights, WA 99001

360-385-4221
509-244-4898

1-800-222-9219
509-244-4697

360-379-9395
509-244-4490

Contractor License # PACIFESI03BR • CCB # 121494

KMB00000198

Northwest Pump and Equipment Co.

2009 Testing Results

Attn: Bruce Craven

**Kinder Morgan Bulk Terminals
11040 N Lombard Terminal 4
Portland, OR 97203**

Testing Results must be available for Regulatory Inspections

Janeene Norris – Compliance Testing Manager
(503)205-2117 or (866)405-2117
Brian Clark – Testing Assistant/Dispatch Supervisor
(503)205-2128 or (877)305-2128

NW Pump Site Assessment

Customer Information

Site Name KINDER-MORGAN BULK TERMINALS Date May 7, 2009
 Address 11040 N LOMBARD St TERMINAL 4 Technicians Name C. A. FINGER -
 City, State, Zip PORTLAND OR 97203 Technicians Signature C. A. Finger

Tank Monitor Make	PNEUMERCATOR		
Monitor Model	LC002		
Monitor S/N	E26785	Yes	No
In-Tank Probe Check	Passing .2 gph test for last 12 months		
Tank #/ID	Probes pulled/cleaned		
DIESEL	Run system diagnostic check		
	Probe cables/connections OK		
	Report printout left onsite		
	Sensor History Printed		
Sensor #/ID	Sensor Passed Testing	X	
ANNULAR SPACE	MONITOR IS A SENSOR PANEL		
LINE CONTAINMENT	SENSOR IS FOR SECONDARY		
	CONTAINMENT W/SENSOR MOUNTED		
	INSIDE		
Overfill Method (select)	<input type="checkbox"/> Alarm	<input checked="" type="checkbox"/> Overfill drop tube	<input type="checkbox"/> Ball Float
	Yes	No	Comments
Overfill is operational			THERE IS A FLAPPER VALVE
Method used to check overfill (select)	<input checked="" type="checkbox"/> Visual	<input type="checkbox"/> Via Probe pull	<input type="checkbox"/> Via Console
	Yes	No	Comments
Site uses a metered fill/nozzle		X	
Overfill compatible with metered fill		X	
Is Cathodic Protection testing required at this site	X		
Is piping under dispensers steel	X		
Is piping under dispensers clear of earthen material		X	
Is turbine piping clear of earthen material		X	
Site is keeping monthly required reports (liquid sensor status/cp records)	X		TESTS ARE RECORDED IN LOG
Method of line leak detection (select)	<input checked="" type="checkbox"/> Mechanical	<input type="checkbox"/> Electronic	<input type="checkbox"/> Safe Suction (confirmed) <input type="checkbox"/> Unsafe Suction (confirmed)
	Yes	No	Comments
Site has containment at the dispenser		X	
Site has containment at the turbine		X	
Containment free of water	X		
Deep sump entry required		X	
Overfill drain valves checked (operational)	X		
Impact valves operational (see add'l form if required)	X		
Visible leaks on hanging hardware		X	

WO# : 68169

DATE: May 7, 2009

10 WEATHER 60 CLOUDY TEMPERATURE IN TANKS N/A .F N/A .C COVER OVER LINE CONCRETE BURIAL DEPTH N/A

[illegible]

WO# 68169

Page #: 2 of 2



NORTHWEST PUMP & EQUIPMENT CO.

2800 N.W. 31st Avenue

Portland, OR. 97210

866-205-7777

3 GPH MECHANICAL & ELECTRONIC LEAK DETECTOR TEST

SITE NAME: KINDER-MORGAN BULK TERMINALS

TEST DATE: May 7, 2009

ADDRESS: 11040 N. LOMBARD St TERMINAL 4

TECHNICIAN NAME: C. A. FINGER

CITY, ST., ZIP: PORTLAND OR 97203

TECH. SIGNATURE: C.A. Finger

PRODUCT: DIESEL

TYPE OF LEAK DETECTOR: RJ XLD

TYPE OF PRODUCT LINE: SWL

3 GPH TEST:

PASS: X

FAIL: _____

REPLACED LEAK DETECTOR ?:

YES: _____

NO: X

NEW LEAK DETECTOR:

PASS: _____

FAIL: _____

TYPE OF NEW LEAK DETECTOR:

S/N: _____

PRODUCT: _____

TYPE OF LEAK DETECTOR: _____

TYPE OF PRODUCT LINE: _____

3 GPH TEST:

PASS: _____

FAIL: _____

REPLACED LEAK DETECTOR ?:

YES: _____

NO: _____

NEW LEAK DETECTOR:

PASS: _____

FAIL: _____

TYPE OF NEW LEAK DETECTOR:

S/N: _____

PRODUCT: _____

TYPE OF LEAK DETECTOR: _____

TYPE OF PRODUCT LINE: _____

3 GPH TEST:

PASS: _____

FAIL: _____

REPLACED LEAK DETECTOR ?:

YES: _____

NO: _____

NEW LEAK DETECTOR:

PASS: _____

FAIL: _____

TYPE OF NEW LEAK DETECTOR:

S/N: _____

PRODUCT: _____

TYPE OF LEAK DETECTOR: _____

TYPE OF PRODUCT LINE: _____

3 GPH TEST:

PASS: _____

FAIL: _____

REPLACED LEAK DETECTOR ?:

YES: _____

NO: _____

NEW LEAK DETECTOR:

PASS: _____

FAIL: _____

TYPE OF NEW LEAK DETECTOR:

S/N: _____

PRODUCT: _____

TYPE OF LEAK DETECTOR: _____

TYPE OF PRODUCT LINE: _____

3 GPH TEST:

PASS: _____

FAIL: _____

REPLACED LEAK DETECTOR ?:

YES: _____

NO: _____

NEW LEAK DETECTOR:

PASS: _____

FAIL: _____

TYPE OF NEW LEAK DETECTOR:

S/N: _____

Certificate of Completion

This certificate is awarded to

B r u c e C r a v e n

For having completed the class

Oregon UST Operator Training


July 30, 2008 Bend, Oregon



Provided by Petroleum Training Solutions and
Sponsored by the Oregon Petroleum Association

This training session was conducted in accordance with the Oregon Department of Environmental Quality's UST System Operator Training Manual. The instructor is listed by the DEQ to provide UST operator training in the State of Oregon.




Ben Thomas, Instructor

7/30/08
Date

Northwest Pump and Equipment Co.

2008 Testing Results

ATTN: Brad

**Kinder Morgan Bulk Terminals
11040 N. Lombard Terminal 4
Portland, OR 97203**

Northwest Pump & Equipment Company

2800 N.W. 31st Avenue Portland, OR. 97210 866-205-7777

Company Name: KINDER MORGAN BULK TERMINALS				Monitor Make: PNEUMERCATOR			
Site Address: 11040 N LOMBARD TERM. 4				Monitor Model: LC1002			
City, State, Zip: PORTLAND, OR 97203				Serial Number: E26785			
Date: 5-12-08				Software Version:			

Monitoring Console	Tank#/Type	Pass	Fail	Actions Performed	Pass	Fail	N/A	Comments
Obtain print out of status of all tanks. Leave copy on site. Obtain results of last leak test results. Leave copy on site.	DIESEL			Run system diagnostic check	X			MONITOR IS SENSOR PANEL ONLY. MONTHLY OPERATION TEST IS PERFORMED AND RECORDED ON A LOG.
				Print out and verify setup values and programmable info			X	
				Verify Battery Back-up-(re-check programming after)			X	
				Compare monitor inventory levels and tank stick readings			X	
				Test remote communications			X	
				Test external overfill alarm for correct operation			X	
				Tank test- date & time			X	
				PLLD test- date & time			X	
Sensors	Sensor#/Type	Pass	Fail	Actions Performed	Pass	Fail	N/A	Comments
Obtain print out of sensor status. Leave copy on site. Remove sensor put sensor into alarm condition and return to normal operating condition. Note any problems in comment section.	ANNULAR SPACE	X		In-tank probes-performed yearly				LINE HAS SECONDARY CONTAINMENT WITH A SENSOR MOUNTED INSIDE.
	LINE CONTAINMENT	X		Run probe diagnostic check			X	
				Inspect probe cables and connections			X	
				Remove probe inspect and clean probe and floats			X	
				If unable to remove probe note in comments section				
				Sensors-performed yearly				
				Run sensor diagnostic check			X	
				Inspect sensor cables and connections	X			
				Test sensor float switches for proper alarm response	X			
				Clean and inspect all sensors	X			
				If unable to remove sensor note in comments section				
				Additional Checks	Supplied	Not Needed	N/A	
				Check supply of print and replenish if necessary			X	
					Yes	No	N/A	
				Are monitoring console and conduits securely mounted	X			
				Are all monitoring console lights/LED's functioning	X			
				Type of line leak detection (electronic, mechanical, suction, etc.)	MECHANICAL/SENSOR			
				Tank leak detection method (CSLD, weekly, Annular only, etc.)	ANNULAR ONLY			
			Overfill Protection Type (ball float, flapper valve, alarm, etc.)	FLAPPER VALVE				

Repairs performed: _____

Technician Name: Andre' Meek

Technician Signature: _____



NORTHWEST PUMP & EQUIPMENT CO.

2800 N.W. 31st. Avenue

Portland, OR. 97210 866-205-7777

3 GPH MECHANICAL & ELECTRONIC LEAK DETECTOR TEST

SITE NAME: KINDER MORGAN BULK TERMINALS

TEST DATE: 5-12-08

ADDRESS: 11040 N LOMBARD TERM. 4

TECHNICIAN NAME: Andre' Meek

CITY, ST., ZIP: PORTLAND, OR 97203

TECH. SIGNATURE:

PRODUCT: DIESEL

TYPE OF LEAK DETECTOR: RED JACKET XLD

TYPE OF PRODUCT LINE: 1.5" STEEL FLEX

3 GPH TEST:

PASS: X

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

DATA CHART FOR USE WITH PETROTITE LINE TESTER

WO# : _____

STATION NUMBER: _____

DATE: 5-12-08

1 LOCATION: KINDER MORGAN BULK TERMINALS 11040 N LOMBARD TERM. 4 PORTLAND, OR 97203

2 OWNER: _____

3 OPERATOR: _____

4 REASON FOR TEST: ANNUAL LINE TEST ON 1 LINE. 1/2 HOUR TEST PERFORMED.

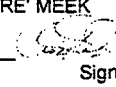
5 TEST REQUESTED BY: _____

6 SPECIAL INSTRUCTIONS: _____

7 CONTRACTOR OR COMPANY MAKING TEST NORTHWEST PUMP & EQUIPMENT ANDRE' MEEK
MECHANIC(S) NAME: _____

8 IS A TANK TEST TO BE ☐ YES 9 MAKE AND TYPE OF TOKHEIM DISPENSER
MADE WITH THIS LINE TEST? ☒ NO PUMP OR DISPENSER (SUCTION OR SUBMERSIBLE)

10 WEATHER SUNNY TEMPERATURE IN TANKS N/A °F _____ °C _____ COVER CONCRETE BURIAL DEPTH N/A

11 IDENTIFY EACH LINE AS TESTED	12 TIME (MILITARY)	13 LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC	14 PRESSURE		15 VOLUME			16 REMARKS SIZE, LENGTH & TYPE OF LINE, # FLEX CONNECTORS CONCLUSION, REPAIRS AND COMMENTS
			Psi OR kPa		READING		NET CHANGE	
			BEFORE	AFTER	BEFORE	AFTER		
DIESEL	1000	TEST IS TO BE MADE AT 1.5 TIMES OPERATING	0	50	.0900	.0715	.0185	4' OF 1.5" STEEL FLEX LINE SERVING 1 DISPENSER
	1010	PRESSURE AT A MIN OF 50 PSI. RECORD SCALE	49	50	.0715	.0715	.0000	
	1020	LEVEL AT 0 PSI. RAISE PRESSURE TO 1.5X O.P.	50	50	.0715	.0715	.0000	
	1030	AND RECORD LEVEL. START TIMER. CHECK	50	50	.0715	.0715	.0000	
		EVERY 10 MINS., RESTORING PRESSURE AND	50	0	.0715	.0880	.0165	BLEEDBACK
		RECORDING CHANGES. AFTER 1/2 HOUR, BLEED					.0020	NET CHANGE
		OFF PRESSURE, RECORD NEW LEVEL. CALCULATE						
TEST RESULTS	BLEEDBACK AND NET CHANGE LEVELS TO DETERMINE LEAK RATE.							17 CONTRACTOR CERTIFICATION Tech: ANDRE' MEEK X  Signature CERTIFICATION# ORN01040406090
	Line Identification	Pass / Fail	Net Volume Change per Hour		Date Tested			
	DIESEL	PASS	.0020		5-12-08			

Northwest Pump and Equipment Co.

May 23,

2007 Testing Results

ATTN: Brad

**Kinder Morgan Bulk Terminals
11040 N. Lombard Terminal 4
Portland, OR 97203**

Northwest Pump and Equipment Co.

Testing Form and Contact Information

For Washington sites, please sign the Underground Storage Tightness Testing Checklist and return to the Department of Ecology at the following address:

Underground Storage Tank Section
Department of Ecology
P.O. Box 47655
Olympia, WA 98504-7655

*****Notice to customers*****

A copy of all testing results are required to be onsite at all times to provide testing verification

Southwest Clean Air Agency Reports have been emailed to Gerry Strawn.

No forms are mailed to Puget Sound Clean Air Agency, however, you are required to keep copies on site.

If you have any questions regarding your test results or want to schedule your site for next year, please contact us at the numbers below.

Thank you for your continued business with our company.

Janeene Norris – Compliance Testing Manager
(503)205-2117 or (866)205-7777
Brian Clark – Testing Assistant/Dispatch Supervisor
(503)205-2128 or (877)305-2128

Northwest Pump & Equipment Company

2800 N.W. 31st Avenue Portland, OR. 97210 866-205-7777

Company Name: KINDER MORGAN BULK TERMINALS Site Address: 11040 N LOMBARD TERM. 4 City, State, Zip: PORTLAND, OR 97203 Date: 5-23-07				Monitor Make: PNEUMERCATOR Monitor Model: LC1002 Serial Number: E26785 Software Version: N/A			
--	--	--	--	---	--	--	--

Monitoring Console	Tank#/Type	Pass	Fail	Actions Performed	Pass	Fail	N/A	Comments
Obtain print out of status of all tanks. Leave copy on site. Obtain results of last leak test results. Leave copy on site.	DIESEL			Run system diagnostic check	X			MONITOR IS SENSOR PANEL ONLY. MONTHLY OPERATION TEST IS PERFORMED AND RECORDED ON A LOG.
				Print out and verify setup values and programmable info			X	
				Verify Battery Back-up-(re-check programming after)			X	
				Compare monitor inventory levels and tank stick readings			X	
				Test remote communications			X	
				Test external overfill alarm for correct operation			X	
				Tank test- date & time			X	
				PLLD test- date & time			X	
Sensors	Sensor#/Type	Pass	Fail	Actions Performed	Pass	Fail	N/A	Comments
Obtain print out of sensor status. Leave copy on site. Remove sensor put sensor into alarm condition and return to normal operating condition. Note any problems in comment section.	ANNULAR SPACE	X		In-tank probes-performed yearly				LINE HAS SECONDARY CONTAINMENT WITH A SENSOR MOUNTED INSIDE.
	LINE CONTAINMENT	X		Run probe diagnostic check			X	
				Inspect probe cables and connections			X	
				Remove probe inspect and clean probe and floats			X	
				If unable to remove probe note in comments section				
				Sensors-performed yearly				
				Run sensor diagnostic check			X	
				Inspect sensor cables and connections	X			
				Test sensor float switches for proper alarm response	X			
				Clean and inspect all sensors	X			
				If unable to remove sensor note in comments section				
				Additional Checks	Supplied	Not Needed	N/A	
				Check supply of print and replenish if necessary			X	
					Yes	No	N/A	
				Are monitoring console and conduits securely mounted	X			
				Are all monitoring console lights/LED's functioning	X			
				Type of line leak detection (electronic,mechanical,suction,etc.)	MECHANICAL/SENSOR			
			Tank leak detection method (CSLD, weekly, Annular only,etc.)	ANNULAR ONLY				
			Overfill Protection Type (ball float, flapper valve,alarm,etc.)	FLAPPER VALVE				

Repairs performed: _____

Technician Name: Andre' Meek

Technician Signature: _____



NORTHWEST PUMP & EQUIPMENT CO.

2800 N.W. 31st. Avenue

Portland, OR. 97210

866-205-7777

3 GPH MECHANICAL & ELECTRONIC LEAK DETECTOR TEST

SITE NAME: KINDER MORGAN BULK TERMINALS

TEST DATE: 5-23-07

ADDRESS: 11040 N LOMBARD TERM. 4

TECHNICIAN NAME: Andre' Meek

CITY, ST., ZIP: PORTLAND, OR 97203

TECH. SIGNATURE: 

PRODUCT: DIESEL

TYPE OF LEAK DETECTOR: RED JACKET XLD

TYPE OF PRODUCT LINE: 1.5" STEEL FLEX

3 GPH TEST:

PASS: X

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

PRODUCT:

TYPE OF LEAK DETECTOR:

TYPE OF PRODUCT LINE:

3 GPH TEST:

PASS:

FAIL:

REPLACED LEAK DETECTOR ?:

YES:

NO:

NEW LEAK DETECTOR:

PASS:

FAIL:

TYPE OF NEW LEAK DETECTOR:

S/N:

DATA CHART FOR USE WITH PETROTITE LINE TESTER

WO#: 1523363

STATION NUMBER: _____

DATE: 5-23-07

1 LOCATION: KINDER MORGAN BULK TERMINALS 11040 N LOMBARD TERM. 4 PORTLAND, OR 97203

2 OWNER: _____

3 OPERATOR: _____

4 REASON FOR TEST: ANNUAL LINE TEST ON 1 LINE. 1/2 HOUR TEST PERFORMED.

5 TEST REQUESTED BY: _____

6 SPECIAL INSTRUCTIONS: _____

7 CONTRACTOR OR COMPANY MAKING TEST NORTHWEST PUMP & EQUIPMENT ANDRE' MEEK
MECHANIC(S) NAME: _____8 IS A TANK TEST TO BE ☐ YES 9 MAKE AND TYPE OF TOKHEIM DISPENSER
MADE WITH THIS LINE TEST? ☒ NO PUMP OR DISPENSER (SUCTION OR SUBMERSIBLE)

10 WEATHER SUNNY TEMPERATURE IN TANKS N/A °F °C COVER CONCRETE BURIAL DEPTH N/A

11 IDENTIFY EACH LINE AS TESTED	12 TIME (MILITARY)	13 LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC	14 PRESSURE		15 VOLUME			16 REMARKS SIZE, LENGTH & TYPE OF LINE, # FLEX CONNECTORS CONCLUSION, REPAIRS AND COMMENTS
			Psi OR kPa		READING		NET CHANGE	
			BEFORE	AFTER	BEFORE	AFTER		
DIESEL	0930	TEST IS TO BE MADE AT 1.5 TIMES OPERATING	50 START		.0100 START			4' OF 1.5" STEEL FLEX LINE SERVING 1 DISPENSER
	0935	PRESSURE AT A MIN OF 50 PSI. RECORD SCALE	50	50	.0100	.0100	.0000	
	0940		50	50	.0100	.0100	.0000	
	0945	LEVEL AT 0 PSI. RAISE PRESSURE TO 1.5X O.P.	50	50	.0100	.0100	.0000	
	0950		50	50	.0100	.0100	.0000	
	0955	AND RECORD LEVEL. START TIMER. CHECK	50	50	.0100	.0100	.0000	
	1000		50	50	.0100	.0100	.0000	
		EVERY 15 MINS., RESTORING PRESSURE AND	50	0	.0100	.0210	.0110	NET CHANGE
		RECORDING CHANGES. AFTER 1 HOUR, BLEED					.0000	NET CHANGE
		OFF PRESSURE, RECORD NEW LEVEL. CALCULATE						
TEST RESULTS	BLEEDBACK AND NET CHANGE LEVELS TO DETERMINE LEAK RATE.							17 CONTRACTOR CERTIFICATION Tech: ANDRE' MEEK Signature CERTIFICATION# ORN0104040607R
	Line Identification	Pass / Fail	Net Volume Change per Hour		Date Tested			
	DIESEL	PASS	.0000		5-23-07			



NORTHWEST PUMP & EQUIPMENT CO.

INVOICE

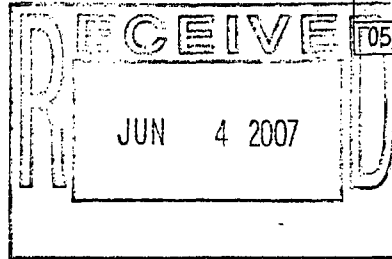
DOCUMENT: Invoice

CUST.#: 66632

SHIP TO: Kinder Morgan Bulk Terminals
11040 N Lombard Terminal 4
Portland, OR 97203

BILL TO: Kinder Morgan Bulk Terminals
PO Box 83838
Portland, OR 97203

ORIGINAL



UPC VENDOR	INVOICE DATE	ORDER NO.
000000	05/25/07	1523363-00
TAKEN BY	P.O. NO.	PAGE #
34	Brad	1
DATE AND TIME PRINTED		
05/25/07 11:46		

REMIT TO:
2800 N.W. 31st Ave.
Portland, Oregon 97210

INSTRUCTIONS			
BRANCH LOCATION	SHIP VIA	SHIPPED	TERMS
Andre Meek	Service Call	05/23/07	Net 30 days

LINE NO.	PRODUCT AND DESCRIPTION	QUANTITY ORDERED	QUANTITY B.O.	QTY SHIPPED	QTY U/M	UNIT PRICE	DISCOUNT	AMOUNT (NET)
3	pq Per Quote Annual Compliance Testing: Perform testing as needed. Make sure site is ready for a DEQ inspection. Scheduled for Wednesday 5.23.07 Brad 503.285.2990 Perform Tank Monitor Inspection \$335.00 Line & Leak Detector Test (1 ea.) \$85.00 PQ Amt \$420.00 05/23/07 Performed services as listed. Documented results.	1	0	1	each	420.00	0.00	420.00
4	em comp Complete	1	0	1	each	0.00	0.00	0.00
Total								420.00
Invoice Total								420.00

04360018	6402	730/15	2300
A/U	R/C	Acct	TOC
Activity	Sub	Phase	Task
UST Inspection			\$ 420
Description			Amount
10202			6-4-07
Approver ID #			Date
Approval			

Last Page

BRANCH LOCATIONS
Kent, WA • Portland, OR • Burbank, CA • Phoenix, AZ • San Diego, CA
Spokane, WA • W. Sacramento, CA • Kennewick, WA • Las Vegas, NV • Anchorage, AK • Honolulu, HI
800-452-PUMP • www.nwump.com

KMB00000214

CCS



Corrosion Control Specialists

P. O. Box 5303
 Kent, Washington 98034
 Phone (253) 520-3424 Fax (253) 520-3425

JOB NO. J-3020DATE: 11/15/06CCS ENGINEER: K.L.W

UNDERGROUND STORAGE TANK CATHODIC PROTECTION DATA SHEET

OWNER: KINDER MORGAN, INC.
11040 N. LOMBARD
PORTLAND, OR 97283-0383
(503) 285-2990

SITE INFORMATION:
 SITE NO: 9786 SITE NAME: KINDER MORGAN
 ADDRESS: 11040 N. LOMBARD
PORTLAND, OR 97283-0383
 CONTACT: BRAD CLINESEETER PHONE NO: 503-285-2990

SYSTEM INFORMATION

ANODE TYPE: MAGNESIUM/STIP3TOTAL ANODE CURRENT UNKNOWNNUMBER OF ANODES 2ANODE WEIGHT UNKNOWNNUMBER OF TEST STATIONS NONE

STRUCTURE TO SOIL POTENTIALS

UNDERGROUND STRUCTURE	POTENTIALS TO Zinc REFERENCE (millivolts)			POTENTIALS TO Cu-CuSO4 REFERENCE (millivolts)			Δ (mv)
	CORROSION	IMMED. OFF	ON	CORROSION	IMMED. OFF	ON	
<u>6K DIESEL TANK</u>							
<u>6K DIESEL TANK EAST</u>						<u>-977</u>	
<u>WEST</u>						<u>-974</u>	

NOTES: TANK IS LOCATED AT NW CORNER OF RAIL CAR DUMP BUILDING. TANK IS A STIP3 WITH DOUBLE WALL CONSTRUCTION. TANK POTENTIALS TAKEN IN SOIL AT THE TURBINE AND AT SOUTH END HAND HOLE. SYSTEM IS WELL PROTECTED.

Northwest Pump and Equipment Co.

Annual Testing

June 1, 2006

**Kinder Morgan Bulk Terminals
11040 N. Lombard Terminal 4
Portland, OR 97203**

Northwest Pump and Equipment Co. Certification Contacts

If you have any questions regarding your test results or want to schedule
Your site for next year, please contact us at the numbers below.

Thank you for your continued business with our company.

Testers: 503-205-7777 or 866-205-7777
Janeene Norris – Compliance Testing Manager
(503)205-2117 or (866)205-7777

Northwest Pump & Equipment Company

Company Name: Kinder-Morgan
Site Address/ID: 11040 N Lombard Terminal 4
 Portland, OR 97203
Date: 6-1-06

Monitoring Console	Model / Serial #	Tank/ Sensor / Line #	Pass	Fail	Comments
--------------------	------------------	-----------------------	------	------	----------

Print out status and diagnostic reports of all probes, sensors, CSLD, PLLD, and any other equipment monitored by this system.	PNEUMERCATOR	LINE SENSOR	✓		1DWS TANK. ANNULAR AND LINE SENSORS INSTALLED AND MONITORED ON A MONTHLY BASIS. SENSORS WERE REMOVED AND PROPER OPERATION VERIFIED.
	LC1000 E26785	ANNULAR SENSOR	✓		

Inspect all probes and floats, sensors, cables, for debris buildup and proper alarm operation. Note type of sensors used and where used.	INSPECTION YES_X				
	PERFORMED? NO_				

Test external overfill alarm and remote communications if present. Note Pass, Fail, or N/A in boxes above.	OVERFILL_PASS_ <input checked="" type="checkbox"/>	OVERFILL DEVICE IS 95% DROP			
	REM. COM. _____	TUBE			

4. Check supply of print and replenish if necessary.	Supplied	Not Needed
		✓

5. Are monitoring console and associated conduits securely mounted?	Yes	No
	✓	

6. Repairs performed

TECHNICIAN Andre' Meek SIGNATURE 

Pneumercator Company, Inc.

**LC 1000 Series, E-14-29, E-700-1, LDE-700, LDE-740, TMS 2000, TMS 3000 with
Level Sensor Models LS600AB, LS600LDBN, LS610, RSU800**

INTERSTITIAL DETECTOR (LIQUID-PHASE)

Detector:

Output type: qualitative
Sampling frequency: continuous
Operating principle: float switch

Test Results:

	<u>unleaded gasoline</u>	<u>diesel</u>	<u>water</u>
LS600AB			
Detection time (sec)	<1	<1	<1
Fall time (sec)	<1	<1	<1
Lower detection limit (in)	3.32	3.28	3.18
LS600LDBN			
Detection time (sec)	<1	<1	<1
Fall time (sec)	<1	<1	<1
Lower detection limit (in)	0.99	0.97	0.87
LS610			
Detection time (sec)	<1	<1	<1
Fall time (sec)	<1	<1	<1
Lower detection limit (in)	0.44	0.43	0.42
RSU800 (low level)			
Detection time (min)	<1	<1	<1
Fall time (min)	<1	<1	<1
Lower detection limit (ppm)	2.57	2.53	2.31
RSU800 (high level)			
Detection time (min)	<1	<1	<1
Fall time (min)	<1	<1	<1
Lower detection limit (ppm)	13.31	13.24	13.01

Specificity Results:

Manufacturer and evaluator claim sensor will respond to any liquid.

Comments:

Sensors are reusable.

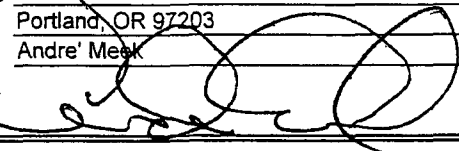
Pneumercator Company, Inc.
120 Finn Court
Farmingdale, NY 11735
Tel: (631) 293-8450

Evaluator: Ken Wilcox Associates
Tel: (816) 443-2494
Date of Evaluation: 01/22/96
(Revised 03/02/01)

NORTHWEST PUMP & EQUIPMENT CO.
2800 NW 31st Avenue
Portland, OR 97210

Phone: 503.227.7867
Fax: 503.205.1465

3 GPH MECHANICAL LEAK DETECTOR TEST

TEST DATE: 6-1-06
SITE NAME: Kinder-Morgan
ADDRESS: 11040 N Lombard Term. 4
Portland, OR 97203
TESTER: Andre' Meek
TESTER'S SIGNATURE: 

PRODUCT: DIESEL
TYPE OF LEAK
DETECTOR: RED JACKET XLD
TYPE OF PRODUCT
LINE: 1.5" FLEX CONNECTOR
3 GPH TEST: PASSED: ☒ FAILED: _____
REPLACED LEAK
DETECTOR YES: _____ NO: _____
IF REPLACED: PASSED _____ FAILED: _____
IF YES, TYPE OF NEW
LEAK DETECTOR: _____ S/N: _____

PRODUCT: _____
TYPE OF LEAK
DETECTOR: _____
TYPE OF PRODUCT
LINE: _____
3 GPH TEST: PASSED: _____ FAILED: _____
REPLACED LEAK
DETECTOR YES: _____ NO: _____
IF REPLACED: PASSED _____ FAILED: _____
IF YES, TYPE OF NEW
LEAK DETECTOR: _____ S/N: _____

PRODUCT: _____
TYPE OF LEAK
DETECTOR: _____
TYPE OF PRODUCT
LINE: _____
3 GPH TEST: PASSED: _____ FAILED: _____
REPLACED LEAK
DETECTOR YES: _____ NO: _____
IF REPLACED: PASSED _____ FAILED: _____
IF YES, TYPE OF NEW
LEAK DETECTOR: _____ S/N: _____

PRODUCT: _____
TYPE OF LEAK
DETECTOR: _____
TYPE OF PRODUCT
LINE: _____
3 GPH TEST: PASSED: _____ FAILED: _____
REPLACED LEAK
DETECTOR YES: _____ NO: _____
IF REPLACED: PASSED _____ FAILED: _____
IF YES, TYPE OF NEW
LEAK DETECTOR: _____ S/N: _____

DATA CHART FOR USE WITH PETROTITE LINE TESTER

WO#: 1362655

STATION NUMBER: _____

DATE: 6-1-06

1 LOCATION: Kinder-Morgan 11040 N Lombard, Terminal 4, Portland, OR 97203

2 OWNER: _____

3 OPERATOR: _____

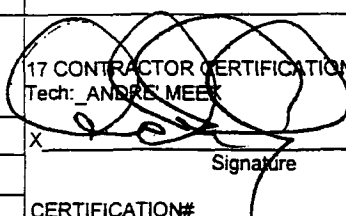
4 REASON FOR TEST: Annual line test

5 TEST REQUESTED BY: _____

6 SPECIAL INSTRUCTIONS: _____

7 CONTRACTOR OR COMPANY MAKING TEST NORTHWEST PUMP & EQUIPMENT ANDRE' MEEK
MECHANIC(S) NAME: _____8 IS A TANK TEST TO BE ☐ YES 9 MAKE AND TYPE OF
MADE WITH THIS LINE TEST? ☒ NO PUMP OR DISPENSER (SUCTION OR SUBMERSIBLE) tokheim dispenser

10 WEATHER rain TEMPERATURE IN TANKS n/a °F °C COVER concrete BURIAL DEPTH 2'

11 IDENTIFY EACH LINE AS TESTED	12 TIME (MILITARY)	13 LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC	14 PRESSURE		15 VOLUME			16 REMARKS SIZE, LENGTH & TYPE OF LINE, # FLEX CONNECTORS CONCLUSION, REPAIRS AND COMMENTS
			Psi OR kPa		READING		NET CHANGE	
			BEFORE	AFTER	BEFORE	AFTER		
DIESEL	1100	TEST IS TO BE MADE AT 1.5 TIMES OPERATING	50 START		.0180 START			4' OF 1.5" FLEX CONNECTOR SERVING 1 DISP UNIT
	1115	PRESSURE AT A MINIMUM OF 5 PSI. RECORD SCALE	50	50	.0180	.0180	.0000	
	1130	LEVEL AT 0 PSI. RAISE PRESSURE TO 1.5X O.P.	50	50	.0180	.0180	.0000	
	1145	AND RECORD LEVEL. START TIMER. CHECK	50	50	.0180	.0180	.0000	
	1200	EVERY 15 MINS., RESTORING PRESSURE AND	50	50	.0180	.0180	.0000	
		RECORDING CHANGES. AFTER 1 HOUR, BLEED	50	0	.0180	.0330	.0150	BLEEDBACK
		OFF PRESSURE, RECORD NEW LEVEL. CALCULATE					.0000	NET CHANGE
TEST RESULTS	BLEEDBACK AND NET CHANGE LEVELS TO DETERMINE LEAK RATE.							17 CONTRACTOR CERTIFICATION Tech: ANDRE' MEEK  Signature CERTIFICATION# ORN0104040607R
	Line Identification	Pass / Fail	Net Volume Change per Hour		Date Tested		X	
	DIESEL	PASS	.0000		6-1-06			

Jul. 20. 2005 11:23AM

MASCOTT EQUIPMENT

No. 1729 P. 1



435 NE Hancock St
Portland, Oregon 97212
(503) 282-2587
(800) 452-5019
Fax: (503) 282-5884

8530 5th Place S
Seattle, WA 98108
(206) 763-7867
(800) 481-7311
Fax: (206) 763-9006

200 S 20th Ave
Pasco, WA 99301
(509) 643-2018
(509) 643-7867
Fax: (509) 643-2051

Fax

To: Brad Kinder Morgan

Fax:

Date:

7/20/05

From:

Jamie Shough

E-mail:

Re:

Results of line test and leak detector

☒ Urgent

☒ For Review

☐ Please Comment

☒ Please Reply

☐ Please Recycle

Transmitting _____ page(s) including this cover page. If transmission is incomplete please call (503) 282-2587.

JUL-21-2005 THU 11:24 AM

FAX NO.

P. 02



Jul. 20. 2005 11:23AM

MASCOTT EQUIPMENT

No. 1729 P. 2

☐ PORTLAND
435 N.E. HANCOCK
PORTLAND, OR 97212
503-282-2587

☐ TRICITIES
200 S. 20TH AVE.
PASCO, WA 99301
509-543-2018

☐ SEATTLE
6530 5TH PLACE SOUTH
SEATTLE, WA 98108
206-763-7867

SERVICE ORDER

97688

ACCOUNT NUMBER
2766

ORDER DATE
JOB PHONE
503 285 2990

WORK ORDERED BY
READ

SOLD TO
Kinder Morgan

JOB NAME
Kinder Morgan B.T. T-4

ADDRESS

ADDRESS
11040 N Lombard T-4

CITY

STATE

CITY
PORTLAND OR 97203

CUSTOMER RO. NUMBER

TECHNICIAN

MFG AUTHORIZATION (if necessary)

MODEL

SERIAL NUMBER

MODEL

SERIAL NUMBER

MATERIAL USED

QTY	UNIT	PART NUMBER	DESCRIPTION	PRICE	AMOUNT

TIME ARRIVED 12⁰⁰ AM PM (circle one)

TIME DEPARTED 2⁰⁰ AM PM (circle one)

WORK DESCRIPTION: Installed all equipment at site per spec.

Get extra parts.

Done for take results by 7/22

WARRANTY ☐COMPLETE ☐PENDING ☐

SERVICEMAN

Buo

DATE COMPLETED

7/19/05

TERMS:

NET 10TH PROX

PRINT CUSTOMER NAME

CUSTOMER AUTHORIZED SIGNATURE

Shun-fare

STANDARD LABOR

2

OVERTIME LABOR

TRAVEL TIME

1

MILEAGE

20

TOTAL MATERIAL

ENVIRONMENTAL FEE

\$14.50

SALES TAX

TOTAL AMOUNT DUE

229.00

☐ PORTLAND
435 N.E. HANCOCK
PORTLAND, OR 97212
503-282-2587

☐ TRICITIES
200 S. 20TH AVE.
PASCO, WA 99301
509-543-2018

☐ SEATTLE
6530 5TH PLACE SOUTH
SEATTLE, WA 98108
206-763-7867

97688

ACCOUNT NUMBER
2766

JOB SITE	
ORDER DATE	JOB PHONE
	503 285 2990

SOLD TO	
Kinder Morgan	
ADDRESS	
CITY	STATE

WORK ORDERED BY	
READ	
JOB NAME	
Kinder Morgan B.T. T-4	
ADDRESS	
11040 N Lombard T-4	
CITY	STATE
Portland	OR
97203	

CUSTOMER P.O. NUMBER	TECHNICIAN	MFG AUTHORIZATION (if necessary)
	Bill	
MODEL	SERIAL NUMBER	MODEL

PROBLEM REPORTED:
Perform annual line, leak detector & tank monitor test

MATERIAL USED				
QTY.	WH	PART NUMBER	DESCRIPTION	PRICE AMOUNT

TIME ARRIVED	AM PM (circle one)	TIME DEPARTED	AM PM (circle one)	Customer Initials
--------------	--------------------	---------------	--------------------	-------------------

WORK DESCRIPTION:
Tested all equipment as per spec.
all tested passed
Will fax test results by 7/22

WARRANTY <input type="checkbox"/>	COMPLETE <input type="checkbox"/>	PENDING <input type="checkbox"/>
-----------------------------------	-----------------------------------	----------------------------------

SERVICEMAN	CHARGES	QTY.	RATE	AMOUNT
Bill	STANDARD LABOR			
DATE COMPLETED	OVERTIME LABOR			
7/19/15	TRAVEL TIME			
TERMS:	MILEAGE			
NET 10TH PROX	TOTAL MATERIAL			
PRINT CUSTOMER NAME	ENVIRONMENTAL FEE		\$14.50	
CUSTOMER AUTHORIZED SIGNATURE	SALES TAX			
Shawn Lane	TOTAL AMOUNT DUE			

Jul. 20. 2005 11:27AM

MASCOTT EQUIPMENT

No. 1729 P. 3

Tank Sentinel Recommended Maintenance
Schedule & Check Out Form

SITE PHONE NO. 503 285 2990 DATE: 7/19/05
OWNER OF EQUIPMENT: Kinder Morgan
NAME OF SITE: Kinder Morgan
SITE ADDRESS: 11046 N Lombard T-4
CITY: PORTLAND STATE: OR ZIP: 97203

Model No. Schedule Maintenance Procedure Date 7/19/05

LC 1000
Console

Annually

1. Verify display is on.
2. Check for proper battery voltage with a Multimeter.
3. Verify printer is operational by printing out an inventory report (if equipped).
4. Verify leak test parameters are set up properly.

✓
|
|
|
|
|

Level Probe

Annually

1. Inspect wire connections in junction box for corrosion
2. Inspect level probe cables for splitting or other signs of wear.
3. Clean shaft with rag.
4. Pull probe and check condition of shaft.

✓
|
|
|
|
|

Overfill
Alarm

Annually

1. Verify alarm is operational

✓
|
|
|
|
|

No. 1729 P. 4

Date 7/19/5

1. Insert sensor in a cup of water or product being monitored to verify operation.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connection in the junction box for signs of corrosion.

1. Wipe optic eye with a clean rag.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Insert in a cup of dark liquid, verify the appropriate alarms show on the display and or shows on a printout.

1. Wipe optic eye with a clean rag.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Insert in a cup of dark liquid, verify the appropriate alarms show on the display and or shows on a printout.

1. Remove float switch from the tank. Manually move float switch to verify it is free moving.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.

1. Remove sensor from the sump
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout.

**Discriminating
Dispenser Sump Sensor**

Model No.	Schedule	Maintenance Procedure	Date
<u>Discriminating Groundwater Sensor</u>	<u>Annually</u>	<ol style="list-style-type: none">1. Remove sensor from the monitoring well.2. Visually inspect cable for signs of splitting or wear.3. Check wiring connections in the junction box for signs of corrosion.4. Insert sensor water electrodes in a cup of water for 45 seconds and verify that the appropriate alarms show on the display & printout.	
<u>Discriminating Turbine Sump Sensor</u>	<u>Annually</u>	<ol style="list-style-type: none">1. Remove sensor from the sump.2. Visually inspect cable for signs of splitting or wear.3. Check wiring connections in the junction box for signs of corrosion.4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout.	
<u>Test overfill alarm</u>	<u>Annually</u>	<ol style="list-style-type: none">1. Trigger relay	

Mascott Service Technician

Date

Customer Signature

Date

all visual & audible alarms
in working order 7/19/5

Beir Bah

Jul. 20. 2005 11:28AM

MASCOTT EQUIPMENT

No. 1729 P. 6

04/09/2002 13:04

5207755309

VMI

PAGE 06

VAPORLESS MANUFACTURING, INC.

LDT-890 Leak Detector Test Record

Contractor

Customer

Mascott Equipment

Kinder Morgan Bulk Terminals

Date

Location

Product

7/19/15 11040 N Lombard T-4 PORTLAND OR OFFER. Diesel

Technician

Bill Baker

Submersible Pump Identification

Manufacturer

Model No.

Serial Number

RED JACKET

P33R1

5209

Leak Detector Identification

Manufacturer

Description

Other Style Leak Detector

RED JACKET

Diaphragm-type

Piston-type

N/A

Temperature-proof seal installed? Yes ☒ No

Leak Detector in Submersible Pump

Test at Dispenser

1. Operating Pump Pressure 25 psi. (Purging Test System)
2. Gallons per hour rate 3 gph (Leak Test (Phase 1))
3. Line pressure with pump shut off 13 psi (Leak Test Phase 1)
4. Bleedback Test with pump off 40 psi (Bleed-back Test)
5. Step-through time to full flow 2 seconds (Step-through Time)
6. Leak detector stays in leak search position (Leak Test Phase 2) Yes ☒ No

LEAK DETECTOR TEST

Note:

Pass = Leak detector stays in slow-flow during GPH test

Fail = Leak detector steps through to allow full pump pressure during GPH test

Pass ☒

Fail

Form 850C (September 1, 2001)
detector.

*Complete thermal expansion test before failing leak

2001 Vaporless Manufacturing, Inc., Prescott Valley, AZ

JUL 20. 2005-11:28AM MASCOTT EQUIPMENT

No. 1729 P. 7

Station Number

Location KINDER MORGAN 11040 N Lombard Portland OR 97203 Date 7/15Owner SameOperator 11 LTReason For Test Annual ComplianceTest Requested by READ

Special Instructions

Contractor or Company Making test MASCOTT EQUIPMake AND type of pump or Dispenser (Suction or Submersible) RED JACKET SubmersibleWeather ClearTemp Range 75°Cover
Over Lines ConcreteApproximate
Burial Depth 2'

Identify each line as Tested	Time Military	Log of Test Procedure Ambient Temp, Weather, etc.	Pressure PSI		Volume Reading		Net Change	Remarks Size Length & Type of Line & Flex Connectors - Conditions and Comments
			Before	After	Before	After		
OFF ROAD DIESEL		Operating Pressure 27 PSI						3' 2" FRP
		RIED Rack O.K.						
	11:45	Pretest	46	46				
	12:15	Start test		46		.0300		
	12:30		46	46	.0300	.0300	+ .0000	
	12:45		46	46	.0300	.0300	+ .0000	
	13:00		46	46	.0300	.0300	+ .0000	
	13:15		46	46	.0300	.0300	+ .0000	
		+ .0400						
		+ .0300						
		RIED Rack + .0100						
		within tolerance						

Test Results

Line Identification	Line Pass Y/N	Line Volume Change per Hour	Date Tested
OFF ROAD DIESEL	Y	+ .0000	7/19/15

Mascott Equipment Company uses industry approved testing devices and will certify a line as testing or not testing at the time of test only. In no event shall Mascott Equipment Company be held liable for incidental or consequential damages due to future equipment failure resulting in product loss or damage to ground, underground or environment.

Test Signature D. D. I.Owner/Operator Signature A. Shuman Lane



435 NE HANCOCK ST.
PORTLAND, OR 97212
(503) 282-2587
(800) 452-5019
FAX: (503) 288-9664

Fax

To: BRAD

Co: KINDER MORGAN

Fax: 503-285-4467

Date: 7/7/04

From: Shannon Dodge

E-mail: sdodge@mascottec.com

Re: LINE TEST RESULTS

☐ Urgent ☐ Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Transmitting 3 page(s) including this cover page. If transmission is incomplete please call (503) 282-2587.

Hello Brad! Here are the test results from PNE for the line testing. Please let me know if you need any other information. Thanks and have a great evening!



sdodge@mascottec.com



Thank you, Shannon

PNE CORP. **LINE LEAK DETECTOR TEST REPORT**

SITE NAME: KINDER MORGAN	TECHNICIAN: DON REEVES
ADDRESS: 11040 N LOMBARD	SIGNATURE: <i>Don Reeves</i>
CITY, STATE, ZIP: PORTLAND, OR	TEST DATE: 7/2/04

PRODUCT:

**LEAK DETECTOR
MANUFACTURER:**

**LEAK DETECTOR
SERIAL NUMBER**

LEAK DETECTOR TYPE:
(diaphragm/piston)

OPERATING PRESSURE:

GPH CONFIRMED:

**CONFIRM SENSING OF
CALIBRATED LEAK:**

PRESSURE STEP THROUGH:
(seconds)

CONCLUSIONS:

DIESEL			
RED JACKET			
116.017			
DIAPHRAGM			
29 PSI			
3 GPH			
YES			
2 SEC			
PASS			

COMMENTS:

PNE CORP.
LINE TEST REPORT

SITE NAME: KINDER MORGAN	TECHNICIAN: DON REEVES
ADDRESS: 11048 N LOWMEAD	SIGNATURE: % Don Reeves
CITY, STATE, ZIP: PORTLAND, OR	TEST DATE: 7/2/04

PRODUCT:

DIESEL

PUMP

MANUFACTURER:

RED JACKET

ISOLATION (pump):

ISOLATION PLUG

ISOLATION

(dispenser):

SOLENOID VALVE

TEST PRESSURE:

50 PSI

INITIAL LEVEL:

0.052

ENDING LEVEL:

0.051

TIME COMPLETED:

10:30

TIME STARTED:

9:30

TOTAL TEST TIME:

60 MIN

FINAL LEAK RATE:

(gallons per hour)

0.001

CONCLUSIONS:

PASS

COMMENTS:



435 NE HANCOCK ST.
PORTLAND, OR 97212
(503) 282-2587
(800) 452-5019
FAX: (503) 288-9664

Fax

To: BRAD Col: _____
Fax: 285 4467 Date: 7/7/4
From: Bill Baker
Re: Tank Monitor inspection

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Transmitting 4 page(s) including this cover page. If transmission is incomplete please call (503) 282-2587.



☐ TRICITIES
200 S. 20TH AVE.
PASCO, WA 99301
509-543-2018

[illegible]

Mascott Equipment Company

Tank Sentinel Recommended Maintenance Schedule & Check Out Form

SITE PHONE NO. 503 285 2990 DATE: 7/7/04

OWNER OF EQUIPMENT: _____

NAME OF SITE: KINDER MORGAN

SITE ADDRESS: 11040 N Lombard

CITY: PORTLAND

STATE: OR.

ZIP: 97283

Model No.	Schedule	Maintenance Procedure	Date
<u>LC1000</u> Console ser# 26785 Anemometer	<u>Annually</u>	<ol style="list-style-type: none"> 1. Verify display is on. 2. Check for proper battery voltage with a Multimeter. 3. Verify printer is operational by printing out an inventory report (if equipped). 4. Verify leak test parameters are set up properly. 	<u>7/7/4</u> <input checked="" type="checkbox"/> <u>N/A</u> <u>N/A</u> <u>N/A</u>
<u>N/A</u> Level Probe	<u>Annually</u>	<ol style="list-style-type: none"> 1. Inspect wire connections in junction box for corrosion 2. Inspect level probe cables for splitting or other signs of wear. 3. Clean shaft with rag. 4. Pull probe and check condition of shaft. 	<u>N/A</u> <u>N/A</u> <u>N/A</u> <u>N/A</u>
<u>N/A</u> Overfill Alarm	<u>Annually</u>	<ol style="list-style-type: none"> 1. Verify alarm is operational 	<u>N/A</u>

Mascott Equipment Co.

435 NE Hancock Portland, OR 97212 Tel. (503) 282-2567 Fax (503) 288-9664 www.mascootec.com

Model No.
LS600LDBN
~~LINE Sump~~ Sensor

Schedule

Annually

Maintenance Procedure

Date 7/7/4

1. Insert sensor in a cup of water or product being monitored to verify operation.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connection in the junction box for signs of corrosion.

✓
✓
✓

LS600LDBN
~~Discriminating~~
Interstitial Sensor

Annually

1. Wipe optic eye with a clean rag.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Insert in a cup of ~~dark~~ liquid, verify the appropriate alarms show on the display and or shows on a printout.

✓
✓
✓

N/A
High Level Sensor

Annually

1. Remove float switch from the tank. Manually move float switch to verify it is free moving.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.

✓
✓
✓

N/A
Discriminating
Dispenser Sump Sensor

Annually

1. Remove sensor from the sump
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout.

✓
✓
✓
✓

Model No.

Schedule

Maintenance Procedure

Date

N/A
Discriminating
Groundwater Sensor

Annually

1. Remove sensor from the monitoring well.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Insert sensor water electrodes in a cup of water for 45 seconds and verify that the appropriate alarms show on the display & printout.

N/A
Discriminating
Turbine Sump Sensor

Annually

1. Remove sensor from the sump.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout.

Test overfill alarm

Annually

1. Trigger relay

Rino Baker
Mascott Service Technician

7/7/4
Date

Customer Signature

Date

701001



P. O. Box 5303
Kent, Washington 98034
Phone (253) 520-3424 Fax (253) 520-3425

DATE: 12/5/03

OCS ENGINEER: Kenneth L. Williams

UNDERGROUND STORAGE TANK CATHODIC PROTECTION DATA SHEET

OWNER:

Kinder Morgan, Inc
11040 N. Lombard
Portland
OR 97283-0383
(503) 285-2990

SITE INFORMATION:

SITE NO: 9786

SITE NAME: Kinder Morgan Bulk Termin

ADDRESS: 11040 N. Lombard
Portland
OR 9

97283-0383

CONTACT: Brad Clineselter PHONE NO: 503-285-2990

SYSTEM INFORMATION

ANODE TYPE: Magnesium/Stip3

TOTAL ANODE CURRENT	Unknown
---------------------	---------

NUMBER OF ANODES 2

ANODE WEIGHT Unknown

NUMBER OF TEST STATIONS None

STRUCTURE TO SOIL POTENTIALS

[illegible]

NOTES: Tank facility ID# is 9786. Tank located at NW Corner of rail car dump buidng. Tank is a StIP3 with double wall construction. Potentials taken at east end riser and adjacent to turbine.

5,000 UST. Niles

12-3-03

BRAD

EVERYTHING OIL ON TANK.

KLW, CCS

DATA sheet should be IN ~~ANALYSIS~~ ANAL
By TOMORROW

(253) 520-3428

INVOICE

CCS Corrosion Control Specialists



P.O. Box 5303
Kent, Washington 98064-5303
Phone (253) 520-3424 • Fax (253) 520-3425

Invoice Number:

J1255-1

To Customer: Kinder Morgan Bulk Terminals
Terminal 4, Pier 4
11040 N. Lombard
Portland, OR 97203

Invoice December 5, 2003
Date:
CCS Account 609
Number:

Attention: Brad Clinefelter

Customer Reference Number: Verbal

ENGINEERING SERVICES:

1 % PER MONTH
ON PAST DUE ACCOUNTS

UST CP Inspection

TOTAL INVOICE: \$ 500.00

04360018	730115	0000	6402	730
A/U	Acct	Sub	R/C	Cost Type
Activity		Property Unit #		
Diesel Tank Inspection		500.00		
Description		Amount		
Brad Clinefelter		12/16/03		
Approval		Date		



Fax Cover Sheet

Terminal 4, Pier 4
11040 N. Lombard
Portland, Oregon 97203
P.O. Box 83838
Portland, Oregon 97283

Date: 5-26-06

Company: CCS

Name: Ken

Fax Number: (253) 520-3428

From: Brad Clmek H

RE: VST Inspection - cathodic

Pages Sent Including Cover Sheet: 3

Message:

```

*****
*                                                                 P.01 *
*                                                                 *
*              TRANSACTION REPORT                                *
*                                                                 *
*                                                                 MAY-26-2006 FRI 09:31 AM *
*                                                                 *
*    FOR:  KINDER MORGAN BULK          5032854467                *
*-----*
*  DATE  START  RECEIVER          TX TIME  PAGES TYPE      NOTE      M#  DP  *
*-----*
*  MAY-26 09:30 AM 12535203429      41"      3  SEND      OK          159 *
*-----*
*****

```

P. O. Box 5303
Kent, Washington 98034
Phone (253) 520-3424 Fax (253) 520-3425

CCS ENGINEER: Kenneth L. Williams



Corrosion Control Specialists II

136 N. Summit Ave, # B-3
Kent, WA 98030

SEATTLE WA 981

05 JUN 2006 PM 5 1



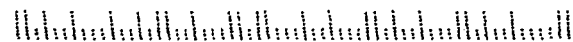
KINDER MORGAN, INC.

PO BOX 83838

PORTLAND, OR 97283

ATTN: BRAD

3728340838





Since 1960

June 30, 2003

To: Brad Clinefelter
Kinder Morgan Bulk Terminals
PO Box 83838
Portland, OR 97283
(503) 285-2990

From: Service Dept.
Mascott Equipment Co., Inc.
435 NE Hancock
Portland, OR 97212
(503) 282-2587 Office
(503) 288-9664 Fax

Dear Brad,

Enclosed are your maintenance check out forms and your 3rd party certification documentation for the Pneumercator system. Please keep both on file. Thank you!

Sincerely,
Bill Baker
Service Technician

PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2587

TRI-CITIES
200 S. 20th Avenue
Pasco, WA 99301
(509) 543-2018



KMB00000245

Audible Alarm Controls LC 1002

PNEUMERCATOR
Liquid Level Control Systems

120 Finn Court, Farmingdale, NY. 11735
(631)293-8450 Fax (631)293-8533 www.pneumercator.com

The LC 1002 alarm console is designed for use with any tank mounted sensing device that transmits an alarm condition by opening or closing switch contacts. While the controls are usable with a variety of field sensors, the LC's are optimized for level control. They assure complete safety and minimum installation cost by requiring only low current, intrinsically safe wiring between console and tank switch.

Housed in a water tight Nema 4 enclosure, the solid state circuitry provides two (2) alarm channel for monitoring one independent sensing point. A bright incandescent alarm light and a loud sounding horn warn of alarm conditions. A dry contact is provided for controlling your external devices such as pumps, valves, or remote alarm stations.



Features

- Two warning lights with name plates
- Two switches
- Two relays
- Nema 4 enclosure with hinged lockable door
- Audible alarm
- Reset and Test buttons
- Intrinsically safe operation of tank mounted sensors
- Industrial coating (inside and out)

Operation

Each alarm channel transmits a low voltage 12 VDC signal to a tank mounted level switch. When the switch senses a level alarm condition, the switch transfers and the LC 1002 circuit energizes the audible horn and indicator light. The light will remain on after silencing the horn by pressing the *Reset* button. At any time, an operator may test the alarm circuit by pressing the *Test* button.

Specifications

Power Input

120 VAC \pm 10%, 60 Hz
Fuse .10 AMP, AG-SLO BLO

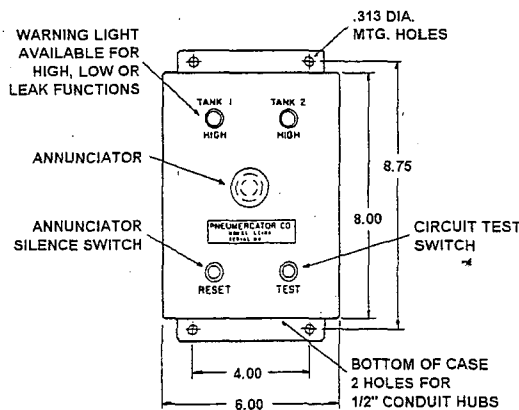
Power to Field Sensor

Low electrical energy; 12 VDC at 15mA provided by control unit to each sensor switch. Safe for Class I, Division I, Groups A, B, C, D; Class II Division I, Groups E, G.

Control Relay Output

Dry switch contact-SPDT per point, rated 3 AMPS at 120 VAC; selectable either normally open or normally closed.

INDICATOR DETAIL



Response Time

Typically 1/2 second. Automatic horn silence (ASC) option, adjustable 30 seconds to 3 minutes.

Indicators/Controls

Red light indicates alarm condition
Horn signals audible alarm -85dB min. Reset button silences alarm
Test button tests alarm circuits

Sensor Cable

Standard 2 conductor #18 AWG
Up to 5000 feet (by customer)



Alternate Procedure
Results of U.S. EPA Standard Evaluation
Liquid-Phase Product Detectors

This form documents the performance of the liquid-phase product detector described below. The evaluation was conducted by the equipment manufacturer or a consultant to the manufacturer according to the U.S. EPA's "Standard Test Procedure for Evaluation Leak Detection Methods: Liquid-Phase Out-of-tank Liquid Product Detectors". The modifications to the procedure were made to accommodate the specialized requirements of interstitial monitors.

Tank owners using this leak detection system should keep this form on file to prove compliance with the federal regulations. Tank owners should check with State and local agencies to make sure this form satisfies their requirements.

Method Description

Name Pneumercator Console Models: LC1000; E-14-29; E-700-1; LDE-700; LDE-740; TMS 3000

Version number(s) LS600AB, LS600LDBN, LS610, and RSU800 Float Level Switches

Vendor Pneumercator Co.

120 Finn Court

(street address)

Farmingdale

(city)

New York

(state)

11735

(zip)

(516) 293-8450

(phone)

Detector output type: () Quantitative (x) Qualitative

Detector operating principle: () Electrical Conductivity () Thermal Conductivity () Interface Probe
() Product Permeable () Product Soluble (x) Other Float Level Switch

Detector sampling frequency: () Intermittent (x) Continuous

Evaluation Results

The detectors listed above were tested for their ability to detect a layer of liquid (hydrocarbon or water) in a tank or a sump. The following parameters were determined:

Lower Detection Limit - The smallest product thickness that the detector can reliably detect.

Specificity - Whether or not the sensor responds to various products.

Precision - Agreement between multiple measurements of the same product level (Standard dev.).

Detection Time - Amount of time the detector must be exposed to product before it responds.

Fall Time - Amount of time before the detector stops responding after being removed from the product.

Evaluation Results (continued)

> Compiled Test Results

Test	Gasoline	Water	Diesel
Probability of Detection	<u>100%</u>	<u>100%</u>	<u>100%</u>
Probability of False Alarm	<u>0%</u>	<u>0%</u>	<u>0%</u>
Accuracy (%)	<u>100%</u>	<u>100%</u>	<u>100%</u>
Bias	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Precision (Std Dev)	<u>SEE ATTACHED TABLES</u>		
Detection Time (hh:mm:ss)	<u><1 second</u>	<u><1 second</u>	<u><1 second</u>
Lower Detection Limit (in)	<u><1 second</u>	<u><1 second</u>	<u><1 second</u>

Specificity Results (%)*

Commercial gasoline	<u>100%</u>	* Any liquid will activate the float level switches tested in this evaluation.
Synthetic gasoline	<u>100%</u>	
Diesel fuel	<u>100%</u>	
Jet-A jet fuel	<u>100%</u>	
n-Hexane	<u>100%</u>	
Toluene	<u>100%</u>	
Xylene(s)	<u>100%</u>	
Water	<u>100%</u>	

> Safety disclaimer: This test procedure only addresses the issue of the interstitial monitors ability to detect leaks. It does not test the equipment for safety hazards.

Certification of Results

I certify that the interstitial monitor was installed and operated according to the vendor's instructions and that the results presented on this form are those obtained during the evaluation. I also certify that the evaluation was performed using the procedures described in the modified test protocol.

H. Kendall Wilcox, Ph.D., President
(printed name)

H. Kendall Wilcox
(Signature)

January 22, 1996
(date)

Ken Wilcox Associates, Inc.
(organization performing evaluation)

Independence, MO 64055
(city, state, zip)

(816) 795-7997
(phone number)

MASCOTT EQUIPMENT COMPANY

Tank Sentinel Recommended Maintenance Schedule & Check Out Form

SITE PHONE NO. 503 285 2990 DATE: 6/19/3

OWNER OF EQUIPMENT: _____

NAME OF SITE: Kinder Morgan

SITE ADDRESS: 11040 N Lombard Team 4

CITY: PORTLAND STATE: OR ZIP: _____

Model No.	Schedule	Maintenance Procedure	Date
PNEUMERCATOR			
<u>LC1002</u>	<u>Annually</u>	1. Verify display is on.	<u>✓</u>
Console		2. Check for proper battery voltage with a Multimeter.	<u>N/A</u>
		3. Verify printer is operational by printing out an inventory report (if equipped).	<u>N/A</u>
		4. Verify leak test parameters are set up properly.	<u>✓</u>
<u>N/A</u>	<u>Annually</u>	1. Inspect wire connections in junction box for corrosion	_____
Level Probe		2. Inspect level probe cables for splitting or other signs of wear.	_____
		3. Clean shaft with rag.	_____
		4. Pull probe and check condition of shaft.	_____

Model No.	Schedule	Maintenance Procedure	Date
LS600LDBN Sump Sensor PRODUCT LINE	<u>Annually</u>	1. Insert sensor in a cup of water or product being monitored to verify operation. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connection in the junction box for signs of corrosion.	✓ ✓ ✓
LS600LDBN Discriminating Interstitial Sensor	<u>Annually</u>	1. Wipe optic eye with a clean rag. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion. 4. Insert in a cup of dark liquid, verify the appropriate alarms show on the display and or shows on a printout.	✓ ✓ ✓
High Level Sensor	<u>Annually</u>	1. Remove float switch from the tank. Manually move float switch to verify it is free moving. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion.	_____ _____ _____
Discriminating Dispenser Sump Sensor	<u>Annually</u>	1. Remove sensor from the sump 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion. 4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout.	_____ _____ _____ _____

Model No.

Schedule

Maintenance Procedure

Date

N/A
Discriminating
Groundwater Sensor

Annually

1. Remove sensor from the monitoring well.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Insert sensor water electrodes in a cup of water for 45 seconds and verify that the appropriate alarms show on the display & printout.

N/A
Discriminating
Turbine Sump Sensor

Annually

1. Remove sensor from the sump.
2. Visually inspect cable for signs of splitting or wear.
3. Check wiring connections in the junction box for signs of corrosion.
4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout.

Rico Sabu
Mascott Service Technician

6/19/13
Date

Customer Signature

Date

Mascott Equipment Company

Tank Sentinel Recommended Maintenance Schedule & Check Out Form

SITE PHONE NO. 503 285 2990 DATE: 7/12/2002

OWNER OF EQUIPMENT: _____

NAME OF SITE: Kinder Morgan Term 4 Pier 4

SITE ADDRESS: 11040 N. Lombard

CITY: PORTLAND STATE: OR ZIP: 97203

Model No.	Schedule	Maintenance Procedure	Date
<u>LC1002</u> Console	Annually	1. Verify display is on. 2. Check for proper battery voltage with a Multimeter. 3. Verify printer is operational by printing out an inventory report (if equipped). 4. Verify leak test parameters are set up properly. 5. RESET/TEST Buttons	<u>PASS</u> <u>N/A</u> <u>N/A</u> <u>N/A</u> <u>PASS</u>
<u>NTA</u> Console	Annually	1. Verify display is on. 2. Check for proper battery voltage with a Multimeter. 3. Verify printer is operational by printing out an inventory report (if equipped). 4. Verify leak test parameters are set up properly.	<u>NTA</u> <u>—</u> <u>—</u> <u>—</u>
<u>N/A</u> Level Probe	Annually	1. Inspect wire connections in junction box for corrosion 2. Inspect level probe cables for splitting or other signs of wear. 3. Clean shaft with rag. 4. Pull probe and check condition of shaft.	<u>—</u> <u>—</u> <u>—</u> <u>—</u>

Mascott Equipment Co.

435 NE Hancock Portland, OR 97212 Tel. (503) 282-2587 Fax (503) 288-9664 www.mascottec.com

Model No.	Schedule	Maintenance Procedure	Date 7/12/12
<u>LS600LBBN</u> Sump Sensor ANULAR PRODUCT LINE	Annually	1. Insert sensor in a cup of water or product being monitored to verify operation. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connection in the junction box for signs of corrosion.	PASS ✓ ✓
<u>N/A</u> Discriminating Interstitial Sensor	Annually	1. Wipe optic eye with a clean rag. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion. 4. Insert in a cup of dark liquid, verify the appropriate alarms show on the display and or shows on a printout.	
<u>N/A</u> High Level Sensor	Annually	1. Remove float switch from the tank. Manually move float switch to verify it is free moving. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion.	
<u>N/A</u> Discriminating Dispenser Sump Sensor	Annually	1. Remove sensor from the sump 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion. 4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout.	

Model No.	Schedule	Maintenance Procedure	Date
<u>N/A</u> Discriminating Groundwater Sensor	Annually	<ol style="list-style-type: none"> 1. Remove sensor from the monitoring well. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion. 4. Insert sensor water electrodes in a cup of water for 45 seconds and verify that the appropriate alarms show on the display & printout. 	<div></div> <div></div> <div></div> <div></div>
<u>N/A</u> Discriminating Turbine Sump Sensor	Annually	<ol style="list-style-type: none"> 1. Remove sensor from the sump. 2. Visually inspect cable for signs of splitting or wear. 3. Check wiring connections in the junction box for signs of corrosion. 4. Tip sensor upside down for 45 seconds and verify that both floats show appropriate alarms on the display and printout. 	<div></div> <div></div> <div></div> <div></div>

Biel Baker 7/12/2002
Mascott Service Technician

PACIFIC NORTHERN ENVIRONMENTAL

1081 COLUMBIA BLVD.

LONGVIEW, WA. 98632

PIPELINE TEST DATA REPORT

SITE NAME:	KINDER MORGAN	TECHNICIAN:	BRET HAGDAHL
ADDRESS:	11040 N LOMBARD TERMINAL 4 PIER 4	SIGNATURE:	<i>% Bret Hagdahl</i>
CITY, STATE, ZIP:	PORTLAND, OR	TEST DATE:	6/28/02

PRODUCT:**PUMP****MANUFACTURER:****ISOLATION (pump):****ISOLATION
(dispenser):****TEST PRESSURE:****INITIAL LEVEL:****ENDING LEVEL:****TIME COMPLETED:****TIME STARTED:****TOTAL TEST TIME:****FINAL LEAK RATE:
(gallons per hour)****CONCLUSIONS:****COMMENTS:**

DIESEL			
RED JACKET			
LINE ISOLATOR			
IMPACT VALVE			
50 PSI			
0.000			
0.000			
1:05			
12:35			
30 MIN			
0.000			
PASS			

PACIFIC NORTHERN ENVIRONMENTAL

1081 COLUMBIA BLVD.

LONGVIEW, WA. 98632

LINE LEAK DETECTOR TEST DATA REPORT

SITE NAME:	KINDER MORGAN	TECHNICIAN:	BRET HAGDAHL
ADDRESS:	11040 N LOMBARD TERMINAL 4 PIER 4	SIGNATURE:	% Bret Hagdahl
CITY, STATE, ZIP:	PORTLAND, OR	TEST DATE:	6/28/02

PRODUCT:

DIESEL

**LEAK DETECTOR
MANUFACTURER:**

RED JACKET

**LEAK DETECTOR
SERIAL NUMBER**

302889964

LEAK DETECTOR TYPE:
(diaphragm/piston)

116-017

OPERATING PRESSURE:

29 PSI

GPH CONFIRMED:

3 GPH

**CONFIRM SENSING OF
CALIBRATED LEAK:**

YES

PRESSURE STEP THROUGH:
(seconds)

2 SEC

CONCLUSIONS:

PASS

COMMENTS:



435 NE HANCOCK ST.
PORTLAND, OR 97212
(503) 282-2587
(800) 452-5019
FAX: (503) 288-9664

Fax

To: BRAD ClineFelter Co: _____
Fax: _____ Date: 7/15/2002
From: BILL BAKER
Re: _____

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Transmitting 6 page(s) including this cover page. If transmission is incomplete
please call (503) 282-2587.

PACIFIC NORTHERN ENVIRONMENTAL

1081 COLUMBIA BLVD.

LONGVIEW, WA. 98632

LINE LEAK DETECTOR TEST DATA REPORT

SITE NAME: KINDER MORGAN	TECHNICIAN:
ADDRESS: 11040 N. Lombard Terminal 4 Pier 4	SIGNATURE: JA
CITY, STATE, ZIP: Portland OR	TEST DATE: 6/28/02

PRODUCT:

LEAK DETECTOR
MANUFACTURER:

LEAK DETECTOR
SERIAL NUMBER

LEAK DETECTOR TYPE:
(diaphragm/piston)

OPERATING PRESSURE:

GPH CONFIRMED:

CONFIRM SENSING OF
CALIBRATED LEAK:

PRESSURE STEP THROUGH:
(seconds)

CONCLUSIONS:

COMMENTS:

DIESEL			
RED JACKET			
30288 9964			
116-017			
29 PSI			
3 GPH			
YES			
2			
PASS			

PACIFIC NORTHERN ENVIRONMENTAL

1081 COLUMBIA BLVD.

LONGVIEW, WA. 98632

PIPELINE TEST DATA REPORT

SITE NAME: <u>KINDER MORGAN</u>	TECHNICIAN:
ADDRESS: <u>11040 N. LOMBARD TERMINAL 4 Pier 4</u>	SIGNATURE: <u>[Signature]</u>
CITY, STATE, ZIP: <u>PORTLAND OR</u>	TEST DATE: <u>6/28/02</u>

PRODUCT:

PUMP

MANUFACTURER:

ISOLATION (pump):

ISOLATION
(dispenser):

TEST PRESSURE:

INITIAL LEVEL:

ENDING LEVEL:

TIME COMPLETED:

TIME STARTED:

TOTAL TEST TIME:


FINAL LEAK RATE:
(gallons per hour)

CONCLUSIONS:

COMMENTS:

<u>DIESEL</u>			
<u>RED JACKET</u>			
<u>LINE ISOLATOR</u>			
<u>COLLISSION VALVE</u>			
<u>50 PSI</u>			
<u>0</u>			
<u>0</u>			
<u>10:05</u>			
<u>12:35</u>			
<u>30 MIN</u>			
<u>0</u>			
<u>PASS</u>			

KMB00000260



P. O. Box 5303
Kent, Washington 98034
Phone (253) 520-3424 Fax (253) 520-3425

CCS ENGINEER: Kenneth L. Williams

UNDERGROUND STORAGE TANK PROGRAM RULE CLARIFICATIONS

Background

The Oregon Department of Environmental Quality's (DEQ) Underground Storage Tank (UST) Program has developed eight rule interpretations. The purpose of this mailing is to bring these documents to the attention of the regulated community and interested parties.

The purpose of the rule interpretations is to assist the regulated community and DEQ staff in making consistent determinations of UST regulatory rules in Oregon. It is important to note that these are not new rules. These documents simply clarify issues with existing regulations.

The topics include:

1. Emergency Generators (No. 00-R-001)

This interpretation of 40 CFR 280.12 as modified by OAR 340-150-003 was created to distinguish between a regulated and a non-regulated (i.e., heating oil tank) UST when it is used to store product on-site for an emergency generator. The UST would generally be considered unregulated if the contents of the UST are consumed on the premises where stored, the emergency generator is designed to operate with heating oil as its fuel source, and the contents of the UST (i.e., diesel) is used as a substitute for heating oil.

2. Leak Detection for USTs - ATGs (No. 01-UST-1002)

This interpretation of 40 CFR 280.43(d) was created to clarify if inventory control worksheets are required when using a third party certified automatic tank gauge. Worksheets are not required in this situation.

3. Corrosion Protection - Cathodic Protection Test Stations for Metal Piping (No. 01-UST-1003)

This interpretation clarifies a rule oversight pertaining to 40 CFR 280.20(b)(2) that requires a test station for metal piping. An old rule numbering mistake left this requirement out. The mistake will be corrected in the next revision of Chapter 340, Division 150 anticipated to be completed in 2002.

4. Corrosion Protection - Cathodic Protection Test Stations (No. 01-UST-1004)

This interpretation of 40 CFR 280.20(a)(2) as modified by OAR 340-150-0003(9) reinforces the requirement for permanent test stations for cathodic protected UST systems. Facilities that do not have a permanent test station(s) may still comply if they have written procedures in place for conducting subsequent testing that provides for consistent test conditions.

5. Leak Detection for USTs - ATGs (No. 01-UST-1008)

This interpretation of 40 CFR 280.40(a)(3) specifies

release detection requirements for ATGs installed before December 22, 1990. These ATGs do not need to meet third-party evaluation performance standards, however, they may only be used to obtain daily product volumes for inventory control.

6. Leak Detection for Piping - ALLDs Interstitial Monitoring Sensor Systems (No. 01-UST-1011)

This rule interpretation determines conformity of stand-alone interstitial monitoring sensor systems (IMSSs) when used in lieu of automatic line leak detectors [(ALLDs) 40 CFR 280.41(1)(i)]. Automatic line leak detectors that meet performance standards are required. Some permittees may have relied on discussions in the Federal Register preamble and assumed that IMSSs were acceptable.

7. Leak Detection for Piping - Annual Line Tightness Testing - Interstitial Monitoring Sensors (No. 01-UST-1012)

This interpretation specifies that interstitial monitoring sensors which meet specific performance standards and conditions [40 CFR 280.43(g)] may be used in lieu of annual line tightness testing [40 CFR 280.44 (b)] for pressurized piping systems.

8. Corrosion Protection - Operation and Maintenance for Existing Tanks (No. 01-UST-1013)

This interpretation pertains to USTs installed prior to 1988 that were upgraded by the addition of cathodic protection to meet 1998 standards [40 CFR 280.21 (b)(2)]. Existing USTs with cathodic protection must be operated and maintained the same as new tanks. An old rule numbering mistake left this requirement out. The mistake will be corrected in the next revision of Chapter 340, Division 150 anticipated to be completed in 2002.

Are your tanks in compliance with these rule clarifications?

Tank owners should review this list of rule clarifications in their entirety to determine if their facilities are in compliance with the specified regulations.

For Additional Information:

Answers to your questions and copies of the rule interpretations are available by contacting DEQ's Helpline toll-free at 1-800-742-7878 (your call will be returned within 24 hours), e-mailing your question or request to tanks.info@deq.state.or.us, or visit our web page at: www.deq.state.or.us/wmc/tank/ust-lust.htm. The rule interpretations are posted at: www.deq.state.or.us/wmc/tank/ruleinterp.htm.



State of Oregon
Department of
Environmental
Quality

Land Quality Division
UST Program
811 SW 6th Avenue
Portland, OR 97204
Phone: (800) 742-7878
Fax: (503) 229-6954
Tanks.info@deq.state.or.us

Automatic Line Leak Detection
in between small spaces
5-13-02
Called Pat Thomas
perkins
Bob
Long House
Marcia Rigney
(503) 282-2587
Marcia
Bill Belar
(503) 282-2587
6-6-02
Shannon
Marcia Rigney
schedule for Tues
6-11-02
0900L

C.C.S.
Ken Williams

Kinder Morgan Bulle Tennant
(503) 285-2990

Mitch Scheel
5/06/02

KINDER MORGAN

ENERGY PARTNERS, L.P.

Fax Cover Sheet

Terminal 4, Pier 4
P.O. Box 83838
Portland, OR 97283
11040 N. Lombard
Portland, Oregon 97203

Date: 6-20-02

Company: CCS

Name: Dennis

Fax Number: (253) 520-3425

From: Brad Clinfelter

RE: Oregon Dept. of Env. Quality Requirement

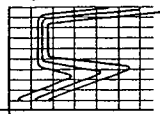
Pages Sent Including Cover Sheet: 3

Message: Ken Williams said he would contact you
on this.

Thanks,

Brad Clinfelter

CCS CORROSION CONTROL SPECIALISTS



6642 South 193rd Place, Suite N-105B
Kent, Washington 98032-2113
Phone (425) 251-8074 • Fax (425) 251-8075

January 5, 1998

Hall-Buck Marine, Inc
Attn: Brad
P.O. Box 83838
Portland, OR 97283-0383

Re: UST Cathodic protection Inspection
8K Stip3 Diesel Tank

Dear Brad,

A cathodic protection data sheet for the referenced tank is provided for your review and files. This testing has verified that your tank is under complete cathodic protection. A separate file should be maintained for this and future inspection records if, or when, Oregon DEQ stops by. CCS will put you on our computerized UST tracking list and give you a call when your next inspection is due.

Sincerely,

Kenneth I. Williams
CCS

klw/J701

CCS

P. O. Box 5303
Kent, Washington 98032
Phone (253) 520-3424 Fax (253) 520-3425

CCS ENGINEER: Kenneth L. Williams

OWNER:

SITE INFORMATION:

SITE NAME: Hall-Buck Marin

CONTACT: Brad Clineselter PHONE NO: 503-285-2990

ANODE TYPE: Magnesium/Stip

NUMBER OF ANODES: 2

Anode Weight: Unknown

TOTAL ANODE CURRENT	Unknown
---------------------	---------

NO. OF TEST STATIONS : None

UNDERGROUND STRUCTURE

POTENTIALS TO
ZINC REFERENCE
(millivolts)

POTENTIALS TO
Cu-CuSO₄ REFERENCE
(millivolts)

CORROSION

OFF

ON

CORROSION

OFF

ON

 Δ (mv)

Diesel Tank/ 8K Stip3

-1314

NOTES: Tank facility ID # is 9786. Permit # is AJBBH. Tank is located at NW Corner of Rail Car Dump Building. Tank is a Stip3 with double wall construction. No test station available. Tank potential taken in soil within hand hole above tank. K LW/Oregon DEQ UST #15276



HALL-BUCK MARINE, INC.

P.O. Box 83838 • Portland, OR 97283-0838

TERMINAL 4, PIER 4
11040 N. LOMBARD
PORTLAND, OR 97203

FAX TRANSMISSION

TO: Brent McMullin

AT: NW Regional Office

FAX: 285-7733

FROM: Brad Clinefelter

RE: Following UST Cathodic Protection Inspection Report from C C S

DATE: 1-8-98

PAGES INCLUDING COVER: 3

MESSAGE:

cc: Marie Krien-Schmidt

MESSAGE CONFIRMATION

JAN-08 14:45 THU

FAX NUMBER : 503-285-4467

NAME : HALL BUCK MARINE INC

FAX NUMBER : 1-504-675-8259

PAGE : 03

ELAPSED TIME : 00' 49"

MODE : G3 STD ECM

RESULTS : O.K

MESSAGE CONFIRMATION

JAN-08 14:32 THU

FAX NUMBER : 503-285-4467

NAME : HALL BUCK MARINE INC

FAX NUMBER : 2857733

PAGE : 03

ELAPSED TIME : 00'49"

MODE : G3 STD ECM

RESULTS : O.K



Kinder Morgan Bulk Terminals, Inc.
11040 North Lombard, Terminal #4, Pier #4
Portland, Oregon 97203

ENVIRONMENTAL COMPLIANCE PROCEDURES & GUIDELINES

Subject: SIGNATORY AUTHORIZATION FOR WASTE DISPOSAL/RECYCLING

DATE: February 14, 2011

1. PURPOSE OF THIS PROCEDURE

The purpose of this procedure is to assure that a) all employees who select waste handling and recycling firms and sign contracts for waste handling and recycling services are fully informed of the responsibility associated with such activities, and b) only fully informed employees sign shipping papers and manifests.

2. PROCEDURES FOR WASTE CONTRACTS

Only officers of KMBT, a facility manager, or a designated Regional Environmental Coordinator are authorized to sign contracts with waste disposal or recycling firms.

3. PROCEDURES FOR WASTE/RECYCLING SHIPPING PAPERS AND MANIFESTS

Only a facility manager or designated representative may sign disposal and/or recycling shipping documents of any kind. If a manager chooses, for reasons of practicality, to have another person sign shipping papers, the manager must carefully review with the designated employee(s) the "Certification" language that appears on the shipping paper or manifest. No more than two employees may be so designated. Both the manager and the designated employee(s) must fully understand what is being signed. Any questions that arise must be directed to the Environmental Affairs Office. The manager must sign the attached "Authorization for Signing of Solid and Hazardous Waste Manifests and Other Shipping papers." The signed Authorization must be kept in the facility's Environmental Files and a copy must be maintained in the employee's personnel files.



Kinder Morgan Bulk Terminals, Inc.

ENVIRONMENTAL COMPLIANCE PROCEDURES & GUIDELINES

**AUTHORIZATION FOR SIGNING OF SOLID AND HAZARDOUS WASTE
MANIFESTS AND/OR OTHER SHIPPING PAPERS**

Because Kinder Morgan Bulk Terminals, Inc., has specified duties under applicable state and federal environmental regulations to properly characterize and package wastes prior to transport to an off-site disposal, treatment, and/or recycling facility, and

Because the signatory on waste manifests and other shipping papers incurs certain responsibilities and liabilities under environmental statutes and regulations which may impact both Kinder Morgan Bulk Terminals, Inc., and the individual signatory, and

Because it is not always possible or practicable for the facility manager to sign the required manifests or shipping papers for each shipment to and off-site disposal, treatment, and/or recycling facility;

Therefore, I, Bruce Craven, Manager of Kinder Morgan Portland Bulk Terminal #4, Authorize the employees in the following positions to sign manifests and/or other shipping papers associated with the off-site disposal, treatment, and/or recycling of waste generated at this facility. Each authorized employee has been advised of the responsibilities associated with such signing.

This Authorization is valid for one year from the date shown below. Unless this Authorization is renewed annually, it is understood that only the KMBT Facility Manager is authorized to sign manifests or other shipping papers for off-site disposal, treatment and/or recycling of solid or hazardous wastes.

JOB TITLE

EMPLOYEE NAME

Administrative Assistant
Assistant Terminal Manager
Superintendent
Superintendent
Superintendent

Edene Coleman
Jeff Bean
Jim Farrell
Pat Garside
Robert Horsey

NAME: Bruce Craven, FACILITY MANAGER

SIGNED:  DATE: 2-14-2011

(This original must be maintained in the facility's environmental files. A copy must be maintained in the employee's personnel file.)



Kinder Morgan Bulk Terminals, Inc.

ENVIRONMENTAL COMPLIANCE PROCEDURES & GUIDELINES

SUBJECT: EQUIPMENT MAINTENANCE WASTE HANDLING

DATE: February 14, 2011

Instructions: This procedure must be reviewed with all KMBT employees at least once per year during a regular Facility Safety/Environmental Meeting. The attached Certification must be signed by employees who have been trained and sent to the Corporate Environmental Office by August 30th each year. Please be sure this procedure is placed in the Facility OMS Book and that the training is included in the facility schedule. Training must be completed at least once per year; but more frequent training is recommended for facilities with high turn-over of employees.

1. PURPOSE OF THIS PROCEDURE;

The purpose of this Procedure is to assure that all KMBT facilities are handling, recycling and/or disposing of used oils and other wastes generated from the maintenance of equipment and vehicles in accordance with applicable state and federal regulations, and that thorough training of all affected employees is being consistently implemented and documented. Such wastes are referred to in this procedure as "EM-Wastes," meaning "equipment maintenance wastes."

The term "EM-Waste," as used in this Procedure, means used motor, lube and hydraulic oils, used oil filters, antifreeze, brake fluids and transmission fluids.

2. TRAINING AND DOCUMENTATION

All KMBT employees, who may handle EM-Waste in the course of performing their job duties, must be trained in the EM-Waste Management Practices described in this Procedure. Each employee must sign a copy of the "Equipment Maintenance Waste Training Certification" (copy attached). The original of the Certification must be kept in facility environmental files and a copy must be sent to the KMBT Environmental Affairs Office. No employee who has not been trained and signed the Certification may handle any EM-Waste at any KMBT facility.

Each Terminal Manager, or the designated Assistant Manager, is responsible for training all affected employees by thoroughly reviewing this Procedure with them and providing a copy to each employee. This must be done as often as necessary to maintain compliance but at least once each year at a routine Safety & Environmental meeting. Upon completing the training each affected employee must sign the Certification of Training. Copies of the Certifications must be submitted to the KMBT Environmental Affairs Office no later than August 30th each year.

New employees must be trained by the Terminal Manager or the designated Assistant Manager upon hiring and the signed Certification sent to the KMBT Environmental Affairs Office.

3. EM- WASTE MANAGEMENT PRACTICES

- All EM-Waste is to be placed into specially labeled drums or specially labeled tanks for recycling/re-use. Each kind of waste must be stored in its own special container labeled with one of the following four names:

USED OIL

USED OIL FILTERS

USED BRAKE FLUIDS

USED ANTIFREEZE

Each of the four waste types must be stored in separate containers. No mixing of the four waste types is allowed. Used Oil Filters must be thoroughly drained of all oil before being placed in the Used Oil Filter container. (Note: At California facilities, containers of used oil, used oil filters, and used antifreeze must also be labeled as "Hazardous Waste" and dated to assure no more than 90-days storage on-site).

- Under no circumstances may other trash or waste material ever be put into any tank or drum that is specially marked for EM-Waste.
- For used oil, no more than four (4) drums full (55gals.each) or two tanks full (600gals. each) may be accumulated on-site at one time.
- All drums of EM-Waste must be stored on/on a contained area with a supply of absorbents readily available for cleanup of leaks, drips and spills. The containment area must be large enough to hold the contents of one drum (55gallons). An ample supply of absorbents must be readily available to clean up leaks, drips and spills.
- All tanks of EM-Waste must be contained within a cement or metal containment area large enough to hold the entire contents of the largest tank. An ample supply of absorbents must be readily available to clean up leaks, drips and spills.
- All EM-Waste storage areas must be inspected at least once per month for signs of leaks, spills, drips. The inspections must be documented on a monthly "EM-Waste Inspection Log" (copy attached). A copy of the facility EM-Waste Inspection Log must be sent to the KMBT Environmental Affairs Office on the last day of each month.
- At all times, absorbent pads or booms are to be placed wherever leaks, spills or drips of EM-Waste may occur so as to prevent the waste from contaminating the ground or waterways.
- If any EM-Waste accidentally gets onto the ground, it must be cleaned up immediately!!!! Used absorbents and any contaminated soils must be put into plastic bags, sealed, and placed in an appropriate container for disposal. An appropriate container is any drum, dumpster or other container designated for waste disposal. (Note: In California, soil and absorbents contaminated with oil and/or antifreeze must be place in a container labeled as "Hazardous Waste" and dated to assure no more that 90-days storage. The waste must be transported by a state-approved hazardous waste transporter to a permitted Hazardous Waste Recycle or Disposal Facility).
- For pickup of EM-Waste, the Facility Manager or Assistant Manager must call a KMBT approved recycling/disposal firm. The list of approved companies is attached.
- If there are any questions concerning the handling of EM-Waste, the KMBT Environmental Affairs Office should always be contacted before taking any action. Call 800-535-8170

Revised June 5, 2009

Phone (503) 285-2990 – Wats 800-659-2990 – Fax (503) 285-4467

KMB00000273



Kinder Morgan Bulk Terminals, Inc.

ENVIRONMENTAL COMPLIANCE PROCEDURES & GUIDELINES

SUBJECT: WASTE MANAGEMENT TRAINING

DATE: February 14, 2011

1. PURPOSE OF THIS PROCEDURE:

The purpose of this Procedure is to assure that all KMBT facilities 1) handle and dispose of all wastes in accord with applicable regulations, and 2) avoid generating any hazardous waste (with the exception of "Universal" hazardous wastes and, in California, used oil).

This training section should be reviewed with all employees at least once each year at a regular safety/environmental meeting. Records of who attended the meeting and on what date are to be kept in the facility's environmental files.

2. HOW TO RECOGNIZE A HAZARDOUS WASTE

Hazardous waste is any material that is being discarded and meets one or more of the following criteria:

- Has a flash point under 140° F. This is called an "Ignitable Waste".
- Has a pH of 2.0 or less (very strong acid) or 12.5 or more (very strong caustic). This is called a "Corrosive Waste".
- Reacts violently with water or is explosive or releases reactive sulfur compounds. This is called a "Reactive Waste".
- Fails the US EPA's special test for toxicity. This is called a "TCLP Toxic Waste". (TCLP=Toxic Constituent Leachate Procedure).
- Is a used solvent included on one of US EPA's list of wastes with "F" numbers. See the list attached. This is called an "F-listed waste".
- Is a commercial product that you want to discard and which contains mostly one of the chemicals on the US EPA's list of wastes with "U" or "P" numbers. See the lists attached. These are called "U-listed wastes" or "P-listed wastes".
- Is a lead-acid battery, a pesticide, a mercury thermostat, a fluorescent light bulb, or used antifreeze. These are called "Universal Wastes" and must be sent to a special handler for recycling.

Note: In some states, for example, California, Used Oil is a Hazardous Waste.

3. REQUIREMENTS FOR ALL WASTE GENERATORS

All facilities are required to a) identify every waste stream generated by their operations; and b) determine if any of the wastes are "hazardous wastes"(40 CFR262.11); and c) assure that all wastes are being stored and disposed of properly. This waste determination must be documented in writing. A copy of the written waste determination must be kept on file at the facility at all times for review by government agency inspectors upon request.

Attached to this procedure is the KMBT "Facility Waste Determination and Management" form that has been designed to meet the regulatory requirements. The form must be kept current by each KMBT facility and maintained in the facility's environmental files for inspection by government agencies.

4. REQUIREMENTS FOR HAZARDOUS WASTE GENERATORS

Any facility that generates hazardous waste must register with the state and receive a "Hazardous Waste Identification Number". The generator must be sure that a) the waste is transported ONLY by a specially licensed Hazardous Waste Transporter, b) a special shipping paper (called a "Hazardous Waste Manifest") is used; and c) the waste goes ONLY to a specially permitted Hazardous Waste Disposal or Recycle location. Annual reports must be filed with the state and certain fees must be paid.

5. SPECIAL CONDITIONS FOR "UNIVERSAL WASTES"

"Universal Waste" is the term used for certain Hazardous Wastes that are so commonly present everywhere that the US EPA has established a special set of less stringent rules for handling them. Currently, the list of Universal Wastes includes only Pesticides, Lead-Acid Batteries, Fluorescent Lamps (Mercury-containing), Mercury Thermostats, and Antifreeze (ethylene glycol). The US EPA may add other items to this list in the future.

KMBT facilities are "Small Quantity Universal Waste Handlers." When any of the listed items has been used and becomes designated for disposal, it is a Universal Waste and must be managed in accord with Rules 1 through 7 below.

1. As a matter of company policy, used batteries, burned out fluorescent lamps, used mercury-containing thermostats, and used antifreeze may be stored on site for no more than 6 months.
2. Pesticides should always be completely used for their originally intended purpose in accord with label instructions and never disposed of.
3. All Universal Waste items must be stored in a designated, secure, dry location in an impervious container under a roof. The container must prevent broken glass and any liquids from escaping.
4. All containers must be labeled with the words, as applicable:

"Used Batteries"	"Used Lamps"
"Used Mercury Thermostats"	"Used Antifreeze"
5. If used battery or thermostat is leaking, it must be secured in a plastic container and immediately taken to a qualified recycler. **DO NOT GET BATTERY ACID OR MERCURY ON YOUR SKIN!!** If you accidentally get either acid or mercury on your skin, immediately wash the area thoroughly with soap and plenty of water. (Get medical attention if a rash or irritation develops.)
6. Used Antifreeze containers must be kept closed at all times.
7. All Universal Wastes must be given only a properly authorized transporter for delivery to either:
 - a) an authorized Large Quantity Universal Waste Handler(i.e., one that, has a US EPA ID number for handling the waste) which accumulates such wastes for later transport to a Destination Facility; or
 - b) an authorized Destination Facility (i.e., one that has a US EPA ID number for handling the waste) which treats, disposes of or recycles Universal Waste.

6. HOW TO AVOID BECOMING A HAZARDOUS WASTE GENERATOR

Except for "Universal" wastes and, in California, used oil, NO KMBT FACILITY IS TO GENERATE ANY HAZARDOUS WASTE WITHOUT PRIOR APPROVAL FROM THE CORPORATE ENVIRONMENTAL AFFAIRS OFFICE. As a **general** policy, all KMBT facilities are to avoid generating hazardous waste by purchasing products that are not hazardous when disposed of. To avoid becoming a generator of hazardous waste, all KMBT facilities must follow these procedures:

- Always get an MSDS on products before you buy them. Check the flash point and the list of ingredients. Compare them with the list in Section II above on "How to Recognize a Hazardous Waste." If there are any questions, or if you are not sure, always call the Corporate Environmental Affairs Department to have the MSDS reviewed.
- Never dispose of any containers that are not totally EMPTY. Spray cans of cleaners, solvents, etc. often contain chemicals that are hazardous waste when disposed of. But if the container is thoroughly EMPTY, then it can be disposed of as a regular waste. The US EPA defines EMPTY CONTAINER as one from which you removed all that you can by normal pouring, pumping, etc., AND which contains no more than 3% by weight of the total capacity of the container. (Note: For containers over 110 gallons in size, it has to be less than 0.3 %.) Containers that held a compressed gas are "empty" when they approach atmospheric pressure.
- Aerosol cans contain compressed, flammable gas. Before disposing of aerosol cans:
 - a) depress the spray nozzle until no liquid or gas will come out of the can. (The material can be sprayed into a 5-gallon pail of "floor sweep" or "oil dry".) Shake the can. If it sounds empty, in not hazardous waste and can be put into the dumpster. Aerosol cans with defective spray nozzles and cans that still contain liquid are hazardous waste when disposed of. They should be returned to the vendor, not disposed of.
- Always require paint contractors to take away their left over paint and thinners. They must never leave any materials on site for KMBT to dispose of. All paints and thinners are hazardous wastes when disposed of. If a large painting job is necessary and it will be unavoidable to dispose of some waste paints and/or thinners, contact the Corporate Environmental Affairs Department so that the required approvals can be obtained from the State.
- Never put any liquid waste into a general trash dumpster. Liquids are not allowed in landfills.
- Some cargo products (for example, certain metal ores like copper concentrate or lead concentrate) may be hazardous wastes when they are disposed of and must be tested prior to disposal. Care must be taken to carefully sweep or vacuum up such products and return them to the product pile. If such products must be disposed of, your facility manager will contact the Corporate Environmental Affairs Department for instructions on how to proceed.
- Always check first with your facility manager before putting anything in a dumpster if you are uncertain about it.

Any employee who has a question or concern about the handling of waste is encouraged to call the Corporate Environmental Affairs Office at 800-535-8170



Kinder Morgan Bulk Terminals, Inc.

Accidental Spill Prevention Plan

Kinder Morgan Bulk Terminals, Inc. Portland Bulk Terminal T-4

Revised August 2003
Revised December 2004
Reviewed 8-12-05
Reviewed 8-7-06
Revised 8-2-07
Revised 8/25/08
Revised 8/3/09
Reviewed 8/20/10
Revised 1/26/2011

Terminal Phone Number: (503) 285-2990

Terminal Physical Address: 11040 N. Lombard, Portland, OR 97203

Terminal Mailing Address: P.O. Box 83838, Portland, OR 97283

Contacts: Bruce Craven, Terminal Manager
Jeff Bean, Assistant Terminal Manager
Brent McMullin, Environmental, Health & Safety Director

This plan has been prepared to meet the requirements of industrial wastewater Discharge Permit # 400-027 issued by the City of Portland for discharges from Kinder Morgan Portland Bulk Terminal #4.

Terminal #4 is a dry bulk marine cargo handling facility which handles primarily "soda ash" with occasional other products including various fertilizers and non-hazardous materials (see below). Please see attached general location and facility maps.

1. Substances handled (or potentially handled):

A. Petroleum products and hazardous substances (listed in 40 CFR 302.4)

- ☐ Sulfuric Acid 66 BE is used to neutralize the pH of wastewater prior to discharge to sewer. Sulfuric acid is stored on the south side of the office/shop building with cover and full containment.
- ☐ Lubricants, fuels, and oils

B. Non-hazardous bulk materials (not listed in 40 CFR 302.4)

- ☐ Soda Ash (sodium carbonate)
- ☐ Potassium Chloride ("potash")
- ☐ Bentonite Clay
- ☐ Sodium Sulfate
- ☐ Talc
- ☐ Soybean Meal
- ☐ Other related fertilizer products

2. Potential points of entry into City sewer system (see attached map entitled "Terminal 4 Facility Map"):

- ☐ Water treatment effluent entry piping inside Warehouse
- ☐ Sinks and Toilets in Warehouse, Main Office, and Lunchroom

3. Measures to prevent entry of spills into the sewer system:

Sulfuric acid is delivered by truck to the site by Northstar Chemicals and the truck driver is responsible for changing totes and ensuring all connections are correct. It is felt that if a spill of Sulfuric Acid were to occur it would, more likely than not, occur during the exchange of totes. Therefore, Attachment 3 is a copy of the spill response plan that must be followed by the driver and is included in this plan by reference.

- ☐ The Sulfuric Acid storage tank is mounted directly above a containment vessel that has greater capacity than that of the storage tank. The Tank and containment vessel are located outside and are covered to keep rain water out.

- Lube oils and other small quantities of chemicals are stored inside the Warehouse. The Warehouse floor is impervious and originally designed with a center sump so spills would collect at the sump. The sump has been permanently sealed.
- All drums of lube oils are stored in containment racks or on containment pallets. The lube oils and containment system are located inside the Warehouse. There is no access into the City sewer system should a spill occur.
- The following "Best Management Practices (BMPs)" are used at Terminal 4:
 - Inadvertent spills and releases of cargo products and leaks and drips of oil on the docks shall be cleaned up by means of sweeping and/or vacuuming and/or absorbents, etc. as quickly as practicable. An ample supply of absorbents and cleaning equipment shall be maintained at all times
 - All affected personnel are trained in safe handling procedures
 - Fuel, lubricants, degreasers, paints and other miscellaneous chemicals are stored indoors within secondary containment
 - Spill kits are available onsite and a spill cleanup firm is contracted for spill response as needed (Foss Environmental)

4. Measures to be taken to respond to spills:

See Attachment 1

5. Description of employee training:

This plan is reviewed with all new employees. The plan and spill reporting procedures are also reviewed with all employees on an annual basis. Additionally, the "Spill Notification" (Attachment 2) and a copy of this plan are posted in the Warehouse.

6. Maintenance, Repair, & Cleaning of Equipment:

A preventative maintenance program is in place including daily, weekly, monthly, quarterly, and annual maintenance addressing materials handling/storage, structures, and treatment facilities. Detailed maintenance records are kept on site and are available for review upon request. In addition, a detailed annual employee training program addressing all aspects of the environmental, health, and safety issues in the terminal has been established and is documented.

7. Recordkeeping and Reporting Procedures:

As noted above, Maintenance and Training is documented. In addition, the terminal has an incident reporting procedure and documentation that includes spills, overfills, or leaks.

An annual management review of this Plan is conducted and documented.

In the event of accidental spill or slug load that may enter the City Sewer System Terminal personnel will immediately notify the City (Attachment 2) and the Terminal

Manager will write a formal report and submit it to the City within 5 days of the incident.

ATTACHMENT 1

MEASURES TO BE TAKEN IN THE EVENT OF A SULFURIC ACID, FUEL, OR LUBRICANT SPILL

Sulfuric Acid Spill

Step 1 - Immediately notify the KMBT supervisor on duty and notify personnel in the area.

Step 2 – For spills of any amount call NRC Environmental Services at (800) 337-7455 and evacuate the area.

Step 3 - Isolate area. Do not allow personnel into area until the situation has been evaluated. Keep personnel upwind from spill or vapors (sulfur dioxide) that might be created when sulfuric acid and soda ash combine.

Step 4. - Determine if vapors are being carried off site and toward neighboring work sites. If so, alert Port of Portland Security, call 911 with site specific details, and neighbors that evacuation of their employees may be prudent. See attached spill notification requirements.

Fuel or lubricant spill

Step 1 - Immediately notify the KMBT supervisor on duty and notify personnel in the area.

Step 2 - Isolate area. Do not allow personnel into area until the situation has been evaluated. If the spill is flammable, keep all sources of ignition away.

Step 3 - Determine amount and source of the spill and, IF SAFE (without exposure to spill or vapors), shut off valves, conveyors, etc. **if gasoline has spilled and it is more than 10 gallons call NRC Environmental Services at (800) 337-7455 and evacuate the area.** Follow the Terminal 4 Emergency Action Plan. For gasoline spills less than 10 gallons, continue to Step 4.

Step 4 - Review MSDS for the spilled material to become familiar with health and safety hazard information. MSDS's are located in the main office.

Step 5 - Keep hazardous materials out of sewers, storm drains, surface water and soils. In the event that the spill enters into the City sewer system or if the spill enters the river or stormwater system, follow the Spill Notification Procedure.

Step 6 –Fuel or Lubricant spill clean-up - If Lubricant or fuel has been spilled, personnel involved in cleanup should wear protective gloves, boots, eye protection, and tyvek coveralls.

Step 7 - With appropriate PPE, enter spill area from upwind.

Step 8 – initiate clean-up: Use Spill Cleanup Kits. Contain all spills. Absorb all free liquid. Remove all ignition sources safely. Stop flow of spill. Prevent from entering all bodies of water. Absorbent materials: pads, sand and earth may be used.

TERMINAL 4 SPILL NOTIFICATION

SPILLS ENTERING CITY SEWER:

IN THE EVENT OF A SPILL OF SULFURIC ACID, FUEL, OR LUBRICANT THAT HAS ENTERED INTO THE CITY OF PORTLAND'S SEWER SYSTEM, THE SUPERVISOR ON DUTY MUST IMMEDIATELY NOTIFY THE CITY OF PORTLAND, BUREAU OF ENVIRONMENTAL SERVICES AT:

Monday – Friday 8:00 am – 4:30 pm -> (503)823-7180

After hours and weekends -> (503) 323-3398

SPILLS ENTERING STORMWATER SYSTEM OR RIVER:

IN ADDITION TO THE ABOVE NOTIFICATION NUMBERS, IF A SULFURIC ACID, FUEL OR LUBRICANT SPILL HAS ENTERED THE STORMWATER DRAINAGE SYSTEM OR RIVER, THE SUPERVISOR ON DUTY MUST IMMEDIATELY CALL:

Oregon Emergency Response System 1(800)452-0311

Or 1(503)378-6377

National Response Center 1(800)424-8802

Local Coast Guard (503)240-9301

Terminal Manager & Assistant Terminal Manager

Northstar Chemical, Inc.
14200 S.W. Tualatin-Sherwood Rd.
Sherwood, Oregon 97140

Truck Driver Emergency Response Procedures for
Transfer of Sulfuric Acid to Customer Storage Tank

F. CUSTOMER SITE SPILL CONTROL

Anyone who uses, delivers, or handles hazardous chemicals must understand that the risk of a spill always exists. Given this possibility, the risk must be minimized by following proper unloading procedures, maintaining our equipment, and following the correct response and communication procedure should a spill occur.

Should a spill of any size take place, the following steps must be followed:

- 1.) If the nature or quantity of the spill will endanger anyone in the area, notify them of the situation and have them evacuate immediately.

- 2.) Take steps to stop the leak, such as:

Close valves.

Turn off the pump

Depressurize the tank

Do not endanger yourself while working to stop a spill. Don a respirator if needed.

If you cannot stop the leak notify the customer and call Dispatch, so that members of the ERT can respond.

- 3.) After the source of the leak has been stopped, or initial efforts have been made, work to contain the spill

Use diking to prevent the chemical from getting to storm drains, areas with other chemicals, or areas where people are working.

Use Bicarb as the absorbent of choice. If it is depleted, other absorbents can be used to dike the material.

Use a storm drain mat or an absorbent sock to stop the spill if needed.

- 4.) After the spill is contained, proper notification must be made:

Spills which are no more than several drips from the fill nozzle on the tank or ground may be absorbed with absorbent wipes and the customer can be notified when the delivery ticket is signed.

For any larger spill, the customer Supervisor and our Dispatch must be notified after containment but before any clean-up is done.

- 5.) Spill clean-up should be done with the review of the customer representative.

Explain what you will do and have the customer approve the procedure.

For spills larger than one gallon or where more materials and personnel are required, have Dispatch send ERT personnel from the yard to help.

If the customer wants to clean-up the spill, then participate as a technical advisor on the product and clean-up, but only to the extent that the customer wishes.

- 6.) Spread Bicarb over the entire spill.

After the liquid has been absorbed, work in the Bicarb with a firm brush or tool. Then sweep up and shovel the material into plastic transport bags.

If free liquid still remains, re-apply and remove.

If the spill area drains to a neutralization system, get the customer's authorization to wash residual material to the drain. After doing so, check the area with pH paper to be sure that all residual is washed away. Repeat until neutral.

If a neutralization system is not available, any residual must be neutralized in place.

Spray neutralizer solution, either base or acid, depending on the material spilled, over the entire spill area. Check with pH paper and apply more neutralizer solution if the pH is not between 6-9. When the entire area is neutralized the material is no longer hazardous and should be washed to remove any remaining salts.

- 7.) Small quantities of used Bicarb may be brought back to our facility since this clean-up material is neutral and not considered a hazardous waste. Larger quantities and any absorbent which contains corrosive properties must be drummed and transported as hazardous waste.

- 8.) Complete any clean-up to the satisfaction of the customer.

No hazardous materials should be left and no sign of the spill should remain.

Have the customer representative OK the clean-up before you leave the site. Write on the delivery tag: "Spill cleaned up to customer satisfaction. " and have a Supervisor sign it.

December 2004

Northstar Chemical Emergency Response Manual

Rev. 5/10

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- A. INTRODUCTION**

The 'One Plan' Emergency Preparedness Document: Emergency preparedness planning is required by many regulatory agencies. In conformance with the nationally recognized standard for a unified emergency preparedness plan, our company has combined all required

planning elements into this one document. This set of procedures can serve as an attachment to plan requests from fire departments, health departments, OSHA, EPA, DOT, or FDA.

B. EMERGENCY NOTIFICATION

IF YOU SEE AN EMERGENCY SITUATION:
(CHEMICAL SPILL, FIRE, BUILDING COLLAPSE, ETC.)

Alert your coworkers, and if needed go to nearest alarm station and pull alarm.

Protect yourself, and remain at the scene until the emergency coordinators or supervisor arrives. Give them the details that you know and follow their directions.

1. **Call 911** if instructed or if it is serious. Report the following information.

- Your name & telephone number.
- Name & address of facility.
- Time & type of incident (e.g. release, fire, spill, injuries, etc.).
- Name of material(s) involved. Do not overstate the quantity or situation.
- Possible hazards to human health or the environment outside the facility.
- Weather conditions, wind direction & speed, and expected off-site effects.

2. **Call neighbor companies** which might be potentially impacted by the incident.

B. EMERGENCY NOTIFICATION (cont.)

Each branch location is to maintain at a minimum these phone contacts:

EMERGENCY SERVICE TELEPHONE DIRECTORY

<u>Service</u>	<u>Telephone Number</u>
Police	911
Sherwood Police	Non Urgent (503) 625-5522
Fire Department	911
Tual. Valley	Non Urgent (503) 649-8577

Highway Patrol**911**

Medical Clinic – Meridian Park	(503) 692-7474
Hospital Emergency Room Meridian Park Hospital	(503) 692-7474
Gas & Electric Utility	PGE (503) 228-6322 NW Gas (503) 226-4211
Key Contractors-GH McCulloch	(503) 691-1199
State Office of Emergency Services	(800) 452-0311e Dept.
State Department of Health	(503) 846-8722
Water Quality Control Board-USA Sewerage	(503) 846-8621
EPA National Response Center	(800) 424-8802
ChemTrec	(800) 424-9300

IN-COMPANY EMERGENCY CONTACTS

These key emergency response leaders should be contacted first. Each branch is to keep this list current at all times. In addition, all delivery drivers are in contact with the branch Dispatcher. Following this page, attach a full company roster with phone contact information.

The facility's 24-hour phone number is: (503) 504-8301/(503) 625-3770

The Corporate Office phone number is: (650) 261-2010

<u>Contact</u>	<u>Name</u>	<u>Cell Phone</u>	<u>Home Phone</u>
Dispatcher	Rob Hansford	(503) 519-3879	(503) 864-4618
Maint. Supvr.	Dan Broad	(503) 710-0176	(503) 925-9719
Ops Mgr.	Mike Steeprow	(503) 572-0310	(503) 625-1895
General Mgr	Matt Werger	(503) 793-4515	(503) 554-0035
Tacoma	Walt Story	(253) 606-3580	(253) 847-4570
Cascade	Steve Durrell	(503) 625-5293	(503) 849-8645
Cascade	Stuart Hunt	(503) 572-5729	

B. EMERGENCY NOTIFICATION (cont.)

NEIGHBOR CONTACT PLAN

Proper contact with neighboring companies during an emergency response or a drill is an important part of community awareness and of the emergency preparedness program. Though it is remote, it is possible that through a fire or chemical spill a hazardous chemical could affect surrounding businesses.

In the event of an emergency response, the Incident Commander will make the decision if neighbor notification is necessary and who should be contacted. Even when no health risk will occur, notification may be required as a public service to

our neighbors who may be concerned about the effects of an incident in progress.

The following map indicates the companies surrounding our facility who may be affected during an emergency. The company names and telephone numbers are to be listed, and information updated annually.

B. EMERGENCY NOTIFICATION

**NEIGHBOR
EMERGENCY NOTIFICATION LIST:**

ALLIED SYSTEMS:	503-625-2560
C & M CONSTRUCTION:	503-625-5289
COTTMAN TRANSMISSION:	503-625-3118
DMV:	503-641-3926
MEINEKE TRANSMISSION:	503-625-4831
PRIDE DISPOSAL:	503-625-6117
SHERWOOD AUTOBODY:	503-625-0664
STARK STREET LAWN & GARDEN:	503-625-2967
WELLON'S:	503-625-6131

C. COORDINATION & INCIDENT COMMAND

Incident Commander: The senior qualified person on-site is to assume responsibility as the Incident Commander. Additional senior members of the Emergency Response Team are to be called immediately.

Qualifications: The Incident Commander must be thoroughly familiar with all aspects of the facility's response plan, all operations and activities at the facility, the location of records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the response plan.

Response Steps

Whenever there is an imminent or actual emergency situation, the Incident Commander or his designee must immediately:

- 1) **Evaluate the situation:** Identify the character, exact source, amount, real extent of any spill, downwind concern, threat of incompatible mixture, fire, or explosion by:
 - Observation and data evaluation.
 - Discussion with witnesses, ERT members, or advisors.
- 2) **In-company notification:** Activate the internal communication systems and two-way radios to notify all facility personnel, as appropriate:

Reason for alarm & actions to take. Or, “Under control”, “false alarm”, other. As part of notification for a chemical spill, describe the situation as:

An **ALERT** (a hazardous release is imminent and will probably occur)

A **SITE EMERGENCY** (a hazardous release has occurred which will not probably have an off-site effect)

A **GENERAL EMERGENCY** (a hazardous release has occurred which will probably have an off-site effect)

C. COORDINATION & INCIDENT COMMAND (cont.)

3) **Evacuation:** Evacuate or shelter-in-place as needed; if evacuation is needed, forward the phones to the answering service. The facility will maintain an evacuation map showing routes & a meeting site.

4) **Secure and protect:** Block off any dangerous areas and restrict access to the facility.

5) **Control and contain:** Direct emergency responders to stop the source of the emergency and to contain any hazardous substance from release to the environment.

6) **Public notification:** If the public outside our facility may be impacted, notify 911 asking that they notify appropriate state or local agencies with designated response roles (in case their help may be needed, including evacuation of the local neighborhood).

Notify the state Emergency Operations Center and the National Response Center only if a spill or release of any material will go off site. Place a second 911 call within 15 minutes to provide an update to local authorities.

7) **Evacuation headcount:** Check roll call to ensure all persons are accounted for, and initiate a search for anyone missing.

8) **Prevent spread of the problem:** Take all reasonable measures necessary to ensure that fires, explosions, spills, and releases do not re-occur, or spread to other parts of the facility. These measures are: collecting and containing materials, removing or isolating containers, closing fire doors, and ensuring proper pressures and operation. If the emergency has caused an operation to stop, the Incident Commander must monitor that system for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment wherever this is appropriate.

C. COORDINATION & INCIDENT COMMAND (cont.)

- 9) Arrival of outside agencies: Upon their arrival explain to their supervisor or the Incident Commander that: a) the emergency is under control on our property, and we need them to 'stand by', or b) we need their help in a coordinated response effort. Explain our expertise, product knowledge and level of training. Continually update them.
- 10) Approaching conclusion: Determine when the facility is safe to resume normal operations, and institute steps to prepare for that. Take photos for insurance reports if appropriate, before resuming operations. When ready, issue the "All Clear."
- 11) Cleanup: Provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or other material that resulted.
- 12) Replenish emergency equipment: Ensure that, in the affected areas of the facility, all emergency equipment listed in the response plan is cleaned and suitable for its intended use before operations are resumed. Advise Maintenance Supervisor of materials used, to ensure prompt replacement.
- 13) Regulatory notice: Notify the appropriate authorities that the facility is in compliance before operations are resumed in the affected area of the facility.
- 14) Follow-up reporting: Prepare a report to the Safety Manager within one week after the incident, written in a way that it can be submitted as an attachment to a letter to be sent concurrently to each public agency which must be informed of the incident. If any material is spilled onto a public roadway during transportation, a RSPA hazmat incident report must be submitted within thirty days (DOT Form F 5800.1). If greater than the RQ is released to the environment, an EPA incident report must be made.
- 15) Update facility records: Note in the operating record the time, date and details of any incident that required the implementing of the emergency response plan. Log the incident on the facility Spill Log.

D. CHEMICAL SPILL RESPONSE

Only trained personnel should become involved in spill control, containment

and clean-up. Coordinate the response using the following guidelines:

1) PROTECT:

- Due to the hazards involved, employees in the area of any spill must wear appropriate protective clothing. This includes, but is not limited to, chemical resistant suits, face-shield, safety glasses, boots, gloves, and respiratory protection.
- The affected area must be secured to deny entry to unqualified or non-essential personnel. Protect yourself, and provide first-aid if needed.

2) NOTIFY:

- A supervisor must be notified of any substantial spill at our site. If the spill is major, the Emergency Response Team (ERT, Section G) will be called into action.
- At a customer location, the customer's supervisor must be notified immediately of all spills, no matter how minor. If their ERT responds, our delivery specialist is to provide product-handling technical guidance under their authority.
- Dispatch must be notified of any spills at a customer location.
- Chemical spills and their quantities must be documented using the Spill/Release Incident Report.

3) CONTAIN:

- Containment prevents the chemicals from traveling to storm drains or the environment. Immediately work to stop the source of the release (valves, pumps, air pressure, patch kits, etc.).

D. CHEMICAL SPILL RESPONSE (cont.)

- If fumes are present, use the fogging hose to control them. Before beginning any response activity, place your respirator around your neck, ready to be donned.
- Chemical storage tanks should be set inside containment, making spills easy to deal with. Transfer product from a leaking tank, if needed, to an alternative tank.
- Storm drains must be protected by spill mats or diking in case chemicals flow outside the containment area.
- Sodium bicarbonate should be used to control the flow of chemicals. Absorbent pillows, oil absorbent or dirt can be used if Bicarb is not available.

4) CLEAN-UP:

- After the spill has been contained and the proper people notified, the best clean-up method will be determined. Avoid methods which create hazardous waste. Use pH paper to check for complete neutralization; document this data for the report.
- The spilled material can be:
 - * Absorbed by Bicarb which can go into the sump.
 - * Packed into drums if non-Bicarb absorbent was used. Do not dispose of these materials in the regular trash.
 - * Pumped in liquid form into drums or a truck.
- Acids or alkalis can be neutralized and/or pumped into the sump.

5) STORAGE AND DISPOSAL:

- All material which is drummed as hazardous waste must be sealed and labeled as such with facility name, location, and date. The Maintenance Supervisor must use a hazardous waste contractor to arrange disposal of hazardous wastes.

D. CHEMICAL SPILL RESPONSE (cont.)

6) EMERGENCY SUPPLIES:

a) TRUCK EMERGENCY RESPONSE KIT

Each delivery trailer is equipped with a spill kit supplied with the items listed on the following page.

Each Delivery Specialist should check his spill kit daily during the pre trip inspection. Each spill kit box should have an intact seal confirming that the kit is in good order. If the seal is missing, then an in-depth inspection and inventory must be completed and any missing items must be replaced before leaving the yard.

Spills greater than 1 gallon or small spills which are in a public place must be reported immediately to Dispatch. Spills of ½ cup or more must be written up on an Incident Report before end of day, so that the Operations Manager can discuss with the Safety department if a DOT report is required. Specific uses of the spill kit depends on the situation.

b) YARD EMERGENCY RESPONSE SUPPLIES

Each facility must be equipped with the supplies listed on the Yard Emergency Response Supplies list (attached). Many supplies can be available from stock on hand, but certain supplies are to be kept in a Mobile Response Supplies kit, which is a tote with cover which can be loaded by forklift onto any response vehicle.

D. CHEMICAL SPILL RESPONSE (cont.)

Trailer Spill Kit					
Date: _____		Trailer # _____			
Item	Metal Shovel				
	Push Broom				
	Tarp				
	Bunge Straps				
	Absorbant Pads				
	Absorbant Pigs				
	Absorbant				
	Citric Acid (Base Neutralization Agent)				
	Sodium Bicarb (Acid Neutralization Agent)				
	Duct Tape				
	Tie Wraps				
	Caution Tape				
	Poly Trash Bags				
	Repair Wrap Scotch 3M (For Leaks)				
	Extra Gloves				
	Pump out hose (trailers equipped w/pump)				
	Pump out stinger (trailers equipped w/pump)				

D. CHEMICAL SPILL RESPONSE (cont.)

Emergency Response Spill Kit					
Date: _____					
Item	Metal Shovel				
	Push Broom				
	Tarp/Containment Pool				
	Bunge Straps				
	Absorbant Pads				
	Absorbant Pigs				
	Absorbant 200 lbs				
	Citric Acid (Base Neutralization Agent)				
	Sodium Bicarb (Acid Neutralization Agent)				
	Duct Tape				
	Tie Wraps				
	Caution Tape				
	Poly Trash Bags				
	Repair Wrap Scotch 3M (For Leaks)				
	Extra Gloves				
	pH Testing Paper				

E. OTHER EMERGENCY RESPONSE

1. FIRE:

- **Notify co-workers to alert everyone. Evacuate if necessary.**
- **If you can identify the source of a small fire and you know how to use a fire extinguisher, use one or two to try to put out the fire.**
- **Otherwise, call the fire department immediately. Shut down gas service, other utilities, or chemical operations if appropriate.**

2. BURNS OR OTHER INJURIES:

- If the source of injury still exists remove the injured party from danger, provided that you can do so without further injury to the injured or yourself.
- Provide first aid only if you are trained and confident that you know the proper course of action.
- For chemical burns: Get the victim to water immediately, and flush for at least 15 minutes. Remove contaminated clothing before flushing the skin with water. For eyes and face: Assist the injured person; the flushing may make it difficult to stand. Hold back the eyelids to get water into the eyes; blink continually.

3. OVER-THE-ROAD PROBLEMS

- Move the truck off the roadway, onto level ground and away from a freeway interchange if possible. Use the spill-capture pool and work to stop the source of the leak. Place cones or reflectors to warn any oncoming motorists.
- Call Dispatch immediately. If response will take more than a few minutes, or you are in a public location, tell Dispatch to call 911 to report a highway problem.

E. OTHER EMERGENCY RESPONSE (cont.)

4. OTHER EMERGENCIES:

- In general, check for injured persons and take appropriate action. Check all storage tanks and lines for damage.
- DIESEL SPILL PREVENTION PLAN: Sites that store petroleum products must design their facility in compliance with a Spill Prevention Control and Countermeasure Plan. This includes maintenance of storage tanks that meet specification, secondary containment (including underground tanks), controls for spills, stormwater controls, and regular facility inspections.
- FACILITY STRUCTURAL DAMAGE: Especially after an earthquake, check the building before re-entry. If the facility has sustained damage, take action to effect repairs and keep unnecessary personnel away.

5. EMERGENCY REPAIRS

Inform the Operations Manager and Maintenance Supervisor of any needed emergency repairs.

a) YARD:

- 1) For small tank leaks, use trucks to empty the tank below the leak level, then begin repair procedures.
- 2) For product lines, shut off the source at the valve and begin repair procedures.

E. OTHER EMERGENCY RESPONSE (cont.)

5. EMERGENCY REPAIRS (cont.)

b) DELIVERY TRAILER:

1) In case of a tank leak use the spill-capture pool, and radio for assistance. Then consider:

- * Transfer the product to another tank or truck if product is compatible.
- * If help is not available, use a trailer hose and pump to re-circulate the product from your spill-capture pool back into the tank that is leaking.

2) In case of a leak in the product line or pump, purge the line into the product tank as best to empty the line of its contents.

F. CUSTOMER SITE SPILL CONTROL AND CLEAN UP

Anyone who uses, delivers, or handles hazardous chemicals must understand that the risk of a spill always exists. Given this possibility, the risk must be minimized by following proper unloading procedures, maintaining our equipment, being aware of your surroundings and following the correct response and communication procedure should a spill occur.

Should a spill of any size take place, the following steps must be followed:

- 1.) If the nature or quantity of the spill will endanger anyone in the area, notify them of the situation and have them evacuate immediately.

2.) Take steps to stop the leak, such as:

- Close valves.
- Turn off the pump.
- Depressurize the tank.
- Do not endanger yourself while working to stop a spill. Don a respirator if needed.
- If you cannot stop the leak notify the customer and call Dispatch, so that members of the ERT can respond.

F. CUSTOMER SITE SPILL CONTROL AND CLEAN UP

3.) After the source of the leak has been stopped, or initial efforts have been made, work to contain the spill.

- Use diking to prevent the chemical from getting to storm drains, areas with other chemicals, or areas where people are working.
- Use Bicarb as the absorbent of choice. If it is depleted, other absorbents can be used to dike the material.
- Use a storm drain mat or an absorbent sock to stop the spill if needed.

4.) After the spill is contained, proper notification must be made:

- Spills which are no more than several drips from the fill nozzle on the tank or ground may be absorbed with absorbent wipes and the customer can be notified when the delivery ticket is signed.
- For any larger spill, the customer Supervisor and our Dispatch must be notified after containment but before any clean-up is done.

5.) Spill clean-up should be done with the review of the customer representative.

- Explain what you will do and have the customer approve the procedure.
- For spills larger than one gallon or where more materials and personnel are required, have Dispatch send ERT personnel from the yard to help.
- If the customer wants to clean-up the spill, then participate as a technical advisor on the product and clean-up, but only to the extent that the customer wishes.

F. CUSTOMER SITE SPILL CONTROL AND CLEAN UP

6.) Spread Bicarb/absorbent over the entire spill.

- After the liquid has been absorbed, work in the Bicarb with a firm brush or tool. Then sweep up and shovel the material into plastic transport bags.
- If free liquid still remains, re-apply and remove.
- If the spill area drains to a neutralization system, get the customer's authorization to wash residual material to the drain. After doing so, check the area with pH paper to be sure that all residual is washed away. Repeat until neutral.
- If a neutralization system is not available, any residual must be neutralized in place. Spray neutralizer solution, either base or acid, depending on the material spilled, over the entire spill area. Check with pH paper and apply more neutralizer solution if the pH is not between 6 - 9. When the entire area is neutralized the material is no longer hazardous and should be washed to remove any remaining salts.

7.) Small quantities of used Bicarb may be brought back to our facility since this clean-up material is neutral and not considered a hazardous waste. Larger quantities and any absorbent which contains corrosive properties must be drummed and transported of as hazardous waste.

8.) Complete any clean-up to the satisfaction of the customer.

- No hazardous materials should be left and no sign of the spill should remain.
- Have the customer representative OK the clean-up before you leave the site. Write on the delivery tag: "Spill cleaned up to customer satisfaction." and have a Supervisor sign it.

G. EMERGENCY RESPONSE TEAM

An Emergency Response Team (ERT) is designated to provide an organized, trained, equipped, and available group of employees who will respond to any emergency in a safe and organized manner.

The ERT follows the Incident Command System (ICS) of organization, in conformance with fire agencies and emergency first responders nationwide.

Our ERT is comprised of an Incident Commander, Hazardous Materials Technicians (Yard personnel) and Specialists (Safety and supervisory personnel), Operations First Responders (delivery specialists), and Notification personnel in the branch office.

Training is provided for ERT members which conforms to the guidelines in the emergency preparedness section of OSHA's Hazwoper standard. This satisfies DOT and EPA emergency training requirements.

Training emphasizes these elements:

- ERT protocol, Incident Command roles, and coordination
- First responder functions, PPE and injury prevention
- Thorough knowledge of our chemical products
- Emergency response equipment and spill mitigation techniques
- Over-the-road and customer site response

Practice drills are held routinely, in conjunction with the Safety Meetings, or in coordination with each branch's Local Emergency Planning Council and fire department.

G. EMERGENCY RESPONSE TEAM (cont.)

TRAINING REQUIREMENTS

The most important element in the planning of emergency response is training. It is required for each individual to learn their roles and tasks, and for the team to learn to work together.

Initially each team member will require the training as indicated under their position requirement. These requirements have been developed from the requirements of OSHA and DOT. All team members, except notification personnel, attend a training meeting on a monthly basis and participate in at least one practice drill per year. Notification personnel must attend an annual refresher training meeting.

Training sessions will be conducted by the branch operations manager and will continue to review and update all important elements of the emergency response system.

POSITION REQUIREMENTS

Incident Commander

- complete facility and chemical knowledge
- qualified by the company as a HazMat specialist
- trained in ICS and ERT principles
- minimum of 5 years chemical industry experience

Hazardous Materials (HazMat) Specialist

- First Responder training
- complete facility and chemical knowledge
- trained in company mitigation techniques
- trained in chemical exposure monitoring
- full knowledge of ERT functions

G. EMERGENCY RESPONSE TEAM (cont.)

POSITION REQUIREMENTS (cont.)

HazMat Technician

- First Responder training
- trained in company mitigation techniques
- Complete facility and chemical knowledge

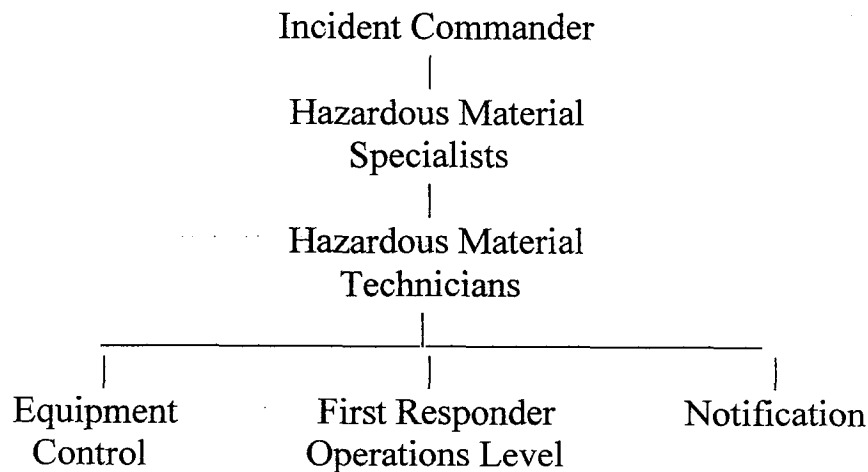
First Responder Operations

- Understanding of ERT
- Understanding of notification system
- Over the road mitigation techniques

Notification Personnel

- Understanding of ERT
- Notification system knowledge

ERT ORGANIZATION CHART



G. EMERGENCY RESPONSE TEAM (cont.)

EMERGENCY BINDER and RESOURCE INFORMATION

Each branch is to maintain an Emergency Response Team binder containing all maps, procedures, and call lists. It is to be kept in an easily accessible location such as the lunch room or near Dispatch.

Additional resource information sheets are to be kept current at the back of each branch's Emergency Response binder. They include:

EPA Reportable Quantity list for spills

Materials of Construction for Trailer Shipments

Environmental Services Emergency Contacts list

EPA Reportable RQ Quantities

Alkaline

Ammonia	100 lbs
Sodium Hydroxide	1000 lbs
Potassium Hydroxide	1000 lbs
Sodium Hypochlorite	100 lbs

Acids

Nitric Acid	1000 lbs
Sulfuric Acid	1000 lbs
Sodium Bisulfite	5000 lbs
Hydrochloric Acid	5000 lbs
Phosphoric Acid	5000 lbs



NRC Environmental Services Response Dispatch

All Spill Responses (any location)	1-800-33-SPILL <24 hours>
Seattle, WA	(206) 546-7150 <24 hours>
Portland, OR	(503) 283-1150 <24 hours>
Alameda, CA	(510) 749-1390 <24 hours>
LA / Long Beach, CA	(562) 432-1304 <24 hours>
San Diego, CA	(619) 234-3677 <24 hours>

EMERGENCY PROCEDURES FOR SPILL RESPONSE

Take no actions that compromise your safety or that of others. Not all hazards will be obvious or visible. Don't become part of the emergency.

1. **STOP THE PRODUCT FLOW**
(if it can be done safely) -- Act Quickly! Secure pumps, close valves, etc.
2. **WARN / EVACUATE PERSONNEL** -- Enforce safety and security measures.
3. **SHUT OFF IGNITION SOURCES** -- Motors, electrical circuits, open flames, etc.
4. **CONTAIN/CONTROL SPILL**
(if it can be done safely) -- Use berms, boom, water hose, etc.
5. **NOTIFY COMPANY REPRESENTATIVE OR QUALIFIED INDIVIDUAL (QI)** -- Provide details about spill (see report form, on reverse side).
6. **NOTIFY STATE (WEMD or WDOE)**
Washington Emergency Management Department or Washington Department of Ecology -- 1-800-258-5990 or 1-800-OILS-911
Don't wait for complete information. Many regulations have "immediate" notification requirements.
7. **NOTIFY the NRC**
The National Response Center – will notify the US Coast Guard for water spills & the US EPA for land spills -- 1-800-424-8802
Don't wait for complete information. Many regulations have "immediate" notification requirements.
8. **NOTIFY SPILL RESPONSE CONTRACTOR** -- NRC Environmental Services
24 Hour # **1-800-33 SPILL**
(1-800-337-7455)
9. **COURTESY NOTIFICATIONS** -- 911 - Local Fire/Police Department, Neighbors, Tribal Organizations, Local Businesses, etc.

Revised 3/3/04

INITIAL SPILL REPORT (NOTIFICATION)

NOTE: It is not necessary to wait for all information before making initial notification.

Reported by (your name, title, telephone number, or monitored radio frequency):

Name of Facility/Vessel/Carrier:

Container/Tank Name & Number (size, type, placard info, manifest, shipping papers etc):

Date / time spill:

Date / time reported:

Location of spill:

Material spilled:

Type and quantity:

Estimate threat of discharge; details of pollution or potential:

Nature of incident and extent of defects / damage:

Weather conditions on scene:

Actions taken or planned by persons on scene:

Current condition of container/vessel/tank:

Injuries or fatalities, safety concerns:

Assistance required:

Other pertinent information (use extra page if necessary):

.....NOTIFICATION RECORD.....

Date / Time

To: (name/case number):

① WEMD / WDOE 1-800-258-5990

② NRC/USCG/EPA 1-800-424-8802

③ Contractor, NRCES 1-800-337-7455

④ OTHERS (see #9 on reverse)

Notifications made by (name):

Revised 3/3/04

**KINDER MORGAN BULK TERMINALS, INC.
PORTLAND BULK TERMINAL #4**

BEST MANAGEMENT PRACTICES (BMPs)

Best Management Practices (BMPs) are guidelines that are developed to assist facility operators to eliminate or minimize, to the extent possible, any unanticipated environmental impacts that may occur from the loading of dry bulk product into vessels. BMPs are written into environmental, health, and safety procedures for the conscientious operation of Terminal 4.

CARGO SPILLAGE:

1. Cargo is delivered to the terminal rail yard by Union Pacific Railroad, after railcars containing cargo are staged the railcars shall be inspected for cargo leakage.
2. If a railcar is seen to be leaking cargo then contact maintenance personnel to stop leakage.
3. Complete the KMBT-4 designated Hopper Car Defect Report and fax to all departments noted on fax machine notification list next to fax machine.
4. Notify terminal clean up personnel of cargo spillage to be cleaned.
5. Cargo spillage on to ship, land and dock from conveyor and cargo handling systems shall be shoveled, swept or vacuumed as operations and safety allows.
6. Place spilled cargo in designated drop boxes for approved disposal.
7. Follow the Kinder Morgan Bulk Terminal #4 written "Terminal Spill Procedures" policy.
8. Complete the Kinder Morgan Bulk Terminal #4 "Safety / Environmental / Cargo Cleanliness Worksheet" every work shift of cargo operations.
9. Complete the Kinder Morgan Bulk Terminal #4 "Superintendent Daily Spill & Clean Up Checklist" which must be completed minimum of twice per day when cargo loading operations occur.
10. Adhere to the Ship Deck Cleanliness Procedure including sign off of the Report of Deck Cleanliness document by on site KM management personnel upon every vessel completion. Signed document is to be kept in the ship's file.

General impacts on storm water discharges:

1. Containment or covering of areas or operations that may contain products that are to be kept out of storm water.
2. Good housekeeping and spill response to clean up any debris or substance, such as oil or grease, when it may interact with storm water.
3. Proper disposal of solid wastes and ensuring waste containers outside wastewater containment areas are covered to prevent interaction with storm water.
4. Follow the requirements of the Kinder Morgan Bulk Terminal #4 Storm Water Pollution Control Plan.
5. Complete the Superintendent Daily Terminal Spill & Clean Up Checklist every cargo operation shift.
6. Complete the Kinder Morgan Bulk Terminal #4 "Daily Inspection Report Locomotive #1295" and "Mobil Equipment Pre-Operational Daily Inspection" reports when operations are conducted.

7. Insuring all storm drains are closed prior to undertaking maintenance and service activities which could result in inappropriate materials entering the storm water system.

Air Quality:

1. Preventive maintenance on air quality control equipment. Reference Dust Control and Maintenance Plan.
2. Monitoring of air quality control equipment to insure proper operation throughout shift.
3. Dust control equipment, specific to cargo transfer operations, must be operated during cargo loading / unloading operations.
4. In the event of malfunctioning dust control equipment, an alternative method of adequate dust control must be immediately implemented or cargo flow must be stopped.
5. Daily inspections of all dust control equipment shall be performed during each work shift - see daily dust control inspection checklist.
6. Loading ships during inclement weather through cement holes or hatch tents mandates the utilization of dust collection evacuation hose. Cargo hatches shall be ventilated through the evacuation hose a minimum of 15 minutes prior to opening slowly after dust evacuation to ensure prevention of excessive fugitive dust emissions.
7. Dust emissions from cargo transfer operations shall not exceed an opacity equal to or greater than 20% for a period aggregating more than 30 seconds in any one hour.
8. After completion of soda ash storage loading / unloading operations, the dust collectors must be operated for a minimum of 15 minutes to evacuate dust from inside the soda ash storage building area, monitor building and conveyors for fugitive dust emissions after dust control equipment is shut down.
9. Complete the daily Kinder Morgan Bulk Terminal #4 "Superintendent's Daily Inspection Checklist for Soda Ash Dust Control Equipment" when cargo loading operations are conducted.

Washing Waste Water impacts include:

1. Preventive maintenance on wastewater system and related equipment
2. Good housekeeping and spill response to clean up any debris or substance, such as oil or grease, before it may enter the sewer or wastewater collection system.
3. Diversion and containment of equipment wash water from storm drain pipes to minimize impact to storm water discharge.
4. Follow the requirements of the Kinder Morgan Bulk Terminal #4 Accidental Spill Control Plan.
5. Employ dry cleaning methods where appropriate to reduce waste water treatment needs.

Locomotive Maintenance:

Two levels of locomotive maintenance activities will occur at Kinder Morgan Portland Bulk Terminal 4. Semi-weekly maintenance will occur over the concrete containment areas immediately outside the west end of the Railcar Dump Building or at the West tail track just before the road crossing entrance to the T-4 facility on either the north or south track routinely used to bring railcars into the dump building. (See Appendix A, Site A) At these sites only inspection and less demanding maintenance or R&R

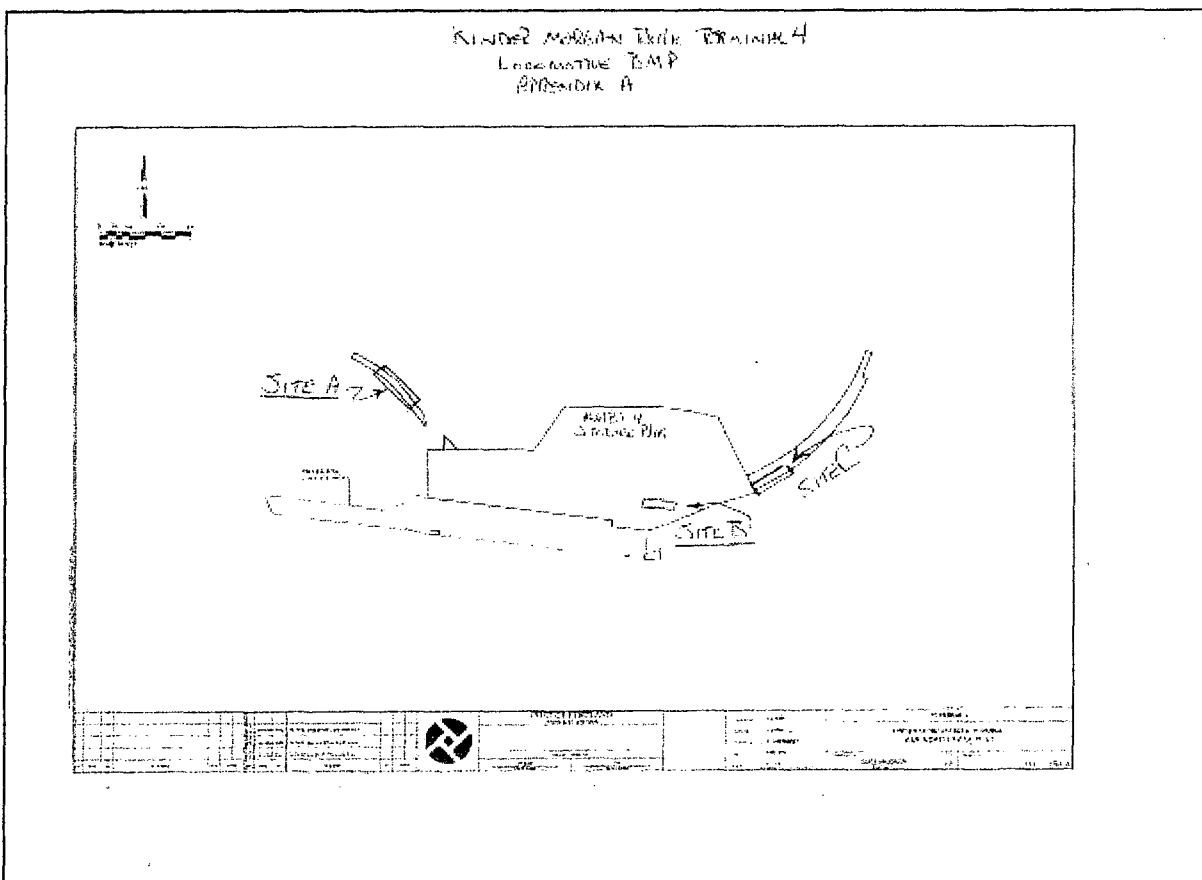
(remove and replace) activities of the sort described in Appendix B will be conducted. Best Management Practices for these activities include the use of secondary containment vessels to hold any buckets, etc. being used for draining liquids and additional impermeable membranes, ground covers and absorbents being used when appropriate to provide additional work vicinity ground protection.

Two secondary locomotive maintenance work areas are also now defined for use at Terminal 4. (See Appendix A, Site B & C) The first is just north of the entrance to the Kinder Morgan Terminal 4 maintenance shop on the south track exiting the railcar dump building. The second is further along on this same rail track just east of the asphalt so as to provide the ability to work underneath the locomotive should that be necessary. Work likely to be performed at either of these sites could be more extensive in nature. However, the routine precautions to be taken in these two areas are more extensive. Here the impermeable barrier will also be bermed to contain any liquid materials generated. Upon completion any liquids will be gathered and disposed of properly according to Kinder Morgan and appropriate industrial waste handling protocols.

In the event repairs are called for that include welding, cutting or grinding, such repairs will be done over Site B when possible. In the event the work must be done at Site C, appropriate groundcovers and or hot work blankets will be used to prevent metallic residue from entering the ballast rock. Protective ground cover at Site C will be placed in a manner to prevent run off during precipitation events.

The pavement and/or ground cover in the work area at Sites B and C will be vacuumed in a timely manner and at the end of the work.

A Storm drain cover, filter fabric, or similarly effective runoff control device will be used at Site B if dust, debris, or other pollutants may escape the work area and enter a storm water catch basin. Contaminated runoff and solids will be collected and properly disposed of before removing the control device(s) at the end of the work day



Kinder Morgan Bulk Terminal 4, Portland, Oregon
Semi-Weekly Peninsula Terminal (P.T.) Railroad Locomotive Inspection Checklist

[illegible]

Best management practices are emphasized because of their importance to effective and efficient facility operation ensuring beneficial environmental, health and safety results. I have reviewed and understand the BMP information as it applies to this Terminal's operation; as well, I acknowledge receipt of this policy.

NAME

DATE

Dust Control Operation and Maintenance Plan

**Kinder Morgan Bulk Terminals, Inc.
Terminal 4
11040 N. Lombard
Portland, OR 97203**

June, 2001

**Updated 11-20-2008
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Terminal 4
Operation & Maintenance Plan

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Kinder Morgan Bulk Terminals, Inc.
Terminal 4, Pier 4
11040 N. Lombard
Portland, OR 97203
PO Box 83838
Portland, OR 97283

DUST CONTROL OPERATION AND MAINTENANCE PLAN (O&M)

I. Introduction: This O&M Plan is intended to meet the requirements of air permit #26-2909

II. Emissions Point Identification

Definitions of	BV = Bin Vent	RCV = Reclaim Conveyor
Abbreviations:	CV = Conveyor	SCV = Storage Conveyor
	DC = Dust Collector	

DC-1: Railcar bottom dump, 4 feeder belts, CV-1 & CV-2 area

BV-2: CV-2 to SCV-1 area of transfer (SCV-1 tail)

BV-3: SCV-1 to SCV-2 or CV-3 area of transfer (SCV-1 head)

BV-4: SCV-2 tail area of transfer

BV-5: SCV-2 to SCV-3 area of transfer (SVC-2 head)

DC-5: Soda Ash Storage main dust collector

BV-6: RCV-1 to RCV-2 area of transfer (RCV-2 tail)

BV-6A: RCV-1 "S" Wrap area

BV-7: RCV-2 to CV-3 area of transfer (CV-3 tail)

BV-8: CV-3 to CV-4 area of transfer (CV-4 tail)

DC-2: CV-4 to Ship Load Boom transfer, Upper Boom Gimball, Mid Boom Seal

DC-3: Bin Vent at lower boom gimball and spout choke feeder combined

DC-4: CV-4 to Ship Loading Boom transfer, upper top of CV-4 gallery.

DC-6: Foot of Marine Tower, negative air ducted to top of CV-4 gallery & CV-4 snub pulley overflow hopper product return.

Operation of dust control equipment during cargo transfer operations is mandatory. There are four methods of cargo transfer operations at KMBT-4.

-Rail to Storage-

This mode of operation requires that the following dust control equipment is operated: DC-1, BV-2, BV-3, BV-4, BV-5, DC-4, DC-5 and DC-6.

-Rail to Ship-

This mode of operation requires that the following dust control equipment is operated: DC-1, BV-2, BV-3, BV-8, DC-2, DC-3, DC-4 and DC-6.

-Storage to Ship-

This mode of operation requires that the following dust control equipment is operated: DC-5, BV-6, BV-7, BV-8, DC-2, DC-3, DC-4 and DC-6.

-Rail to Storage and Storage to Ship (simultaneous)-

This mode of operation requires that the following dust control equipment is operated: DC-1, BV-2, BV-3, BV-4, BV-5, DC-5, BV-6, BV-7, BV-8, DC-2, DC-3, DC-4 and DC-6.

III. Training

Kinder Morgan Bulk Terminal 4 management personnel shall be trained in the operation and maintenance of the aforementioned dust control equipment. Records of such training shall be kept on file at KMBT-4 (See page 5 – KMBT-4 Dust Control Operation and Maintenance Training Record).



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Dust Control Operation and Maintenance Training Records

This certifies that _____ has been trained
in the operation and maintenance of dust control equipment at
KMBT-4. The following topics were covered in training:

- ✿ KMBT-4 Dust Control Operation and Maintenance Plan (O&M)
- ✿ Emission Point Identification
- ✿ Filtration Media and maintenance thereof
- ✿ Blower and Air Duct Systems
- ✿ Pulse Jet Purge Systems
- ✿ Choke Feed System
- ✿ Proper Methods of cleaning, lubrication and adjustment

Signature of trained employee

Date

Signature of Terminal Manager

Date

IV. Maintenance Specifications

Frequency of specific maintenance jobs is proportional to degree of inclement weather (ambient moisture) and tonnage transferred (ship loading and storage loading activity). The occurrence of inclement weather during periods of cargo transfer operations may necessitate increased maintenance of dust control equipment.

The following is the minimum maintenance to be performed on dust control equipment per every 2,000,000 metric tons of soda ash loaded.

- DC-1:**
- One complete filter media change out with laundered or new filters
 - One complete washing of entire bag house and air intake duct system
 - One complete washing of air duct product return system
 - Check blower / motor poly chain drive belt twice
 - Grease blower bearings twice

- BV-2:**
- One complete filter media change out with laundered or new filters
 - Two complete washings of entire bin vent housing
 - Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
 - Grease blower bearings twice
 - Grease motor bearings once

- BV-3:**
- One complete filter media change out with laundered or new filters
 - Two complete washings of entire bin vent housing
 - Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
 - Grease blower bearings twice
 - Grease motor bearings once

- BV-4:**
- One complete filter media change out with laundered or new filters
 - Two complete washings of entire bin vent housing
 - Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
 - Grease blower bearings twice
 - Grease motor bearings once

- BV-5:**
- One complete filter media change out with laundered or new filters
 - Two complete washings of entire bin vent housing
 - Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
 - Grease blower bearings twice
 - Grease motor bearings once

- DC-5:** - One complete filter media change out with laundered or new filters
- One complete washing of entire bag house and air intake duct system
- One complete washing of air lock product return system
- Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
- Grease motor bearings once
- Grease blower bearings twice

- BV-6:** - One complete filter media change out with laundered or new filters
- Two complete washings of entire bin vent housing
- Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
- Grease blower bearings twice
- Grease motor bearings once

- BV-6A:** - One complete filter media change out with laundered or new filters
- Two complete washings of entire bin vent housing
- Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
- Grease blower bearings twice
- Grease motor bearings once

- BV-7:** - One complete filter media change out with laundered or new filters
- Two complete washings of entire bin vent housing
- Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
- Grease blower bearings twice
- Grease motor bearings once

- BV-8:** - One complete filter media change out with laundered or new filters
- Two complete washings of entire bin vent housing
- Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
- Grease blower bearings twice
- Grease motor bearings once

- DC-2:** - One complete filter media change out with laundered or new filters
- Two complete washings of entire bin vent housing
- Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
- Grease blower bearings twice
- Grease motor bearings once

- DC-3:** - One complete filter media change out with laundered or new filters
- Two complete washings of entire bin vent housing
- Check blower / motor "V" belt drive for wear or slippage; tighten or replace as needed
- Grease blower bearings twice
- Grease motor bearings once

- DC-4:** - One complete filter media change out with new or laundered filters
-Two complete washing of entire bin vent housing.
-Check blower / motor "V" belt drive for wear or slippage, tighten or replace as needed.
-Grease blower bearings twice.
-Grease motor bearings once.

- DC-6:** -One complete filter media change out with laundered or new filters.
-One complete washing of entire bag house and air intake duct system.
-Check blower / motor "V" belt drive for wear or slippage, tighten or replace as needed.
-Grease motor bearings once.
-Grease blower bearings twice.

V. Maintenance Procedures

The following is the minimum daily inspections and maintenance to be performed on dust control equipment to be operated:

- DC-1:** - Inspect dust collector product return hoppers to verify not plugged; unplug immediately, if needed
- Check air duct suction to make sure air is free-flowing; unplug immediately, if needed
- Check pulse jet purge system and replace any defective components immediately as needed
- Check product return air lock components and replace or repair defective components immediately as needed
- Check motor control amp reading to verify blower motor is operating within acceptable levels
- BV-2:** - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed
- Check pulse jet purge system and replace defective components immediately as needed
- Check and verify "V" belt is not slipping; tighten or replace as needed
- Check motor control amp reading to verify blower motor is operating within acceptable levels
- BV-3:** - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed
- Check pulse jet purge system and replace defective components immediately as needed
- Check and verify "V" belt is not slipping; tighten and replace as needed
- Check motor control amp reading to verify blower motor is operating within acceptable levels
- BV-4:** - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed
- Check pulse jet purge system and replace defective components immediately as needed

- Check and verify "V" belt is not slipping; tighten and replace as needed
 - Check motor control amp reading to verify blower motor is operating within acceptable levels
- DC-5:** - Inspect dust collector product return hoppers to verify not plugged; unplug immediately, if needed
- Check air duct suction to make sure air is free-flowing; unplug immediately, if needed
 - Check pulse jet purge and replace any defective components immediately as needed
 - Check product return air lock components and replace or repair defective components immediately as needed
 - Check motor control amp reading to verify blower motor is operating within acceptable levels
- BV-6:** - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed
- Check pulse jet purge system and replace defective components immediately as needed
 - Check and verify "V" belt is not slipping; tighten or replace as needed
 - Check motor control amp reading to verify blower motor is operating within acceptable levels
- BV-6A:** - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed
- Check pulse jet purge system and replace defective components immediately as needed
 - Check and verify "V" belt is not slipping; tighten or replace as needed
 - Check motor control amp reading to verify blower motor is operating within acceptable levels
- BV-7:** - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed
- Check pulse jet purge system and replace defective components immediately as needed
 - Check and verify "V" belt is not slipping; tighten or replace as needed
 - Check motor control amp reading to verify blower motor is operating within acceptable levels
- BV-8:** - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed
- Check pulse jet purge system and replace defective components immediately as needed
 - Check and verify "V" belt is not slipping; tighten or replace as needed
 - Check motor control amp reading to verify blower motor is operating within acceptable levels
- DC-2:** - Inspect bin vent housing for excessive product build-up and dislodge

- build-up as needed**
 - Check pulse jet purge system and replace defective components immediately as needed**
 - Check and verify "V" belt is not slipping; tighten or replace as needed**
 - Check motor control amp reading to verify blower motor is operating within acceptable levels**
- DC-3: - Inspect bin vent housing for excessive product build-up and dislodge build-up as needed**
- Check pulse jet purge system and replace defective components immediately as needed**
 - Check and verify "V" belt is not slipping; tighten or replace as needed**
 - Check motor control amp reading to verify blower motor is operating within acceptable levels.**
- DC-4: -Inspect bin vent housing for excessive product build up and dislodge build up as needed.**
- Check pulse jet purge system and replace defective components immediately as needed.**
 - Check and verify "V" belt is not slipping, tighten or replace as needed.**
 - Check motor control amp reading to verify blower motor is operating within acceptable levels.**
- DC-6: -Inspect dust collector product return hoppers to verify not plugged.**
- Unplug immediately if needed.**
 - Check air duct suction to make sure air is free flowing.**
 - Unplug immediately if needed.**
 - Check pulse jet purge system and replace and defective components immediately as needed.**
 - Check motor control amp reading to verify blower motor is operating within acceptable levels.**

ATTACHMENT 1



Kinder Morgan Bulk Terminals, Inc.
Terminal 4, Pier 4
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Superintendent Daily Inspection Checklist Soda Ash Dust Control Equipment

Performed By: _____ Date: _____ Time: _____
Weather Conditions: _____ Operation Type: (Circle One)
Wind Speed: _____ (Simultaneous) (Storage to Ship)
Wind Direction: _____ (Rail to Ship) (Rail to Storage)

CHOKE FEEDER

Check prior to start of each workshift
Check prior to start of each ship's hold
All six proximity switches
Vane pneumatic actuating system
Oiler
Spout auto raise system
Vertical dust shroud assembly
Verify proper operation at 1st cargo

SHIPLOADER

Lower gimball
Upper gimball
Mid Boom packing
CV-4 head chute proximity switch

DUST COLLECTORS

DC-1: Railcar bottom dump, 4 feeder belts, CV-1 & CV-2 area
DC-2: CV-4 to Shipload Boom transfer, Upper Boom Gimball,
Mid-Boom Seal
DC-3: Bin Vent at Lower Boom Gimball and Spout Choke Feeder
combination
DC-5: Soda Ash Storage main dust collector
BV-2: CV-2 to SCV-1 area of transfer (SCV-1 tail)
BV-3: SCV-1 to SCV-2 or CV-3 area of transfer (SCV-1 head)
BV-4: SCV-2 tail area of transfer
BV-5: SCV-2 head to SCV-3 area of transfer (SCV-3 tail)
BV-6: RCV-1 to RCV-2 area of transfer (RCV-2 tail)
BV-6A: RCV-1 "S" Wrap area
BV-7: RCV-2 to CV-3 area of transfer (CV-3 tail)
BV-8: CV-3 to CV-4 area of transfer (CV-4 tail)
DC-4: CV-4 to Ship Loading Boom transfer upper gallery
DC-6: Foot of Marine Tower negative air duct to top CV-4 gallery

SATISFACTORY

Notes: _____

ATTACHMENT 2

- UPSET LOG -
(Pursuant to Excess Emission Rules OAR 340-20-350 to -380)

The Department will determine if enforcement action is warranted based on the submittal below of complete details related to each excess emissions event. Please attach additional information to the back of this form.

LOG NO:	MONTH:	YEAR:	DATE:
EMISSIONS PROBLEM:			
<input type="checkbox"/> REQUIRED TO NOTIFY DEQ IMMEDIATELY		<input type="checkbox"/> NOT REQUIRED /ENTER IN LOG	
<input type="checkbox"/> REQUIRED TO SUBMIT WRITTEN EE REPORT Date Written EE Report Due:		<input type="checkbox"/> NOT REQUIRED/ENTER IN LOG	
<input type="checkbox"/> PLANNED UPSET (Anticipated)		<input type="checkbox"/> UNPLANNED UPSET	
340-20-380 (1) (a) TIME UPSET BEGAN:		TIME UPSET REPORTED:	
Name of DEQ person contacted:			
340-20-380 (1) (b) CAUSE: (Check where appropriate) <input type="checkbox"/> Process Startup/Shutdown <input type="checkbox"/> Scheduled Maintenance <input type="checkbox"/> Fuel Problem <input type="checkbox"/> Other Known Problem <input type="checkbox"/> Unknown at this time		340-20-380 (1) (c) EQUIPMENT INVOLVED: <div style="text-align: right;"><input type="checkbox"/> See Attached</div>	
340-20-380 (c) DURATION OR EST. TIME UNTIL RETURN TO NORMAL OPERATION:			
340-20-380 (c) MAGNITUDE OF INCREASED EMISSIONS OVER NORMAL RATES:			
Based on continuous monitoring data or estimate? <input type="checkbox"/> See Attached			
340-20-380 (d) DESCRIBE EFFORTS MADE TO MINIMIZE AMOUNT/DURATION OF EMISSIONS:			
<div style="text-align: right;"><input type="checkbox"/> See Attached</div>			
340-20-380 (e) DESCRIBE CORRECTIVE ACTION TAKEN:			
Measures taken to prevent reoccurrence: <input type="checkbox"/> See Attached			
340-20-380 (f) (A) Describe how process or handling equipment and pollution control equipment were maintained and operated in a manner consistent with good practice for minimizing emissions:			
<div style="text-align: right;"><input type="checkbox"/> See Attached</div>			
340-20-380 (f) (B) Describe how repairs or corrections were made in a timely manner:			
<div style="text-align: right;"><input type="checkbox"/> See Attached</div>			
Indicate if overtime labor or contract labor/equipment used to reduce the amount and duration of excess emissions: <input type="checkbox"/> See Attached			
Have there been previous excess emissions of this kind ? If so, briefly describe the cause of these events: <input type="checkbox"/> See Attached			
OPERATOR(S) ON DUTY:		REPORT COMPLETED BY:	
FACILITY NAME: Kinder Morgan Bulk Terminal 4		DEQ PERMIT NO: 26-2909	

Upset Log shall be submitted annually to the Department in accordance with OAR 340-20-375

ATTACHMENT 3



Kinder Morgan Bulk Terminals, Inc.
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Portland, OR 97283

DUST EMISSION COMPLAINT LOG

Date and Time of Complaint:

Person(s) Making Complaint:

Phone Number of Person Making Complaint:

Date and Time of Dusting Incident (If Any):

Upset Log Number:

(If applicable, attach Upset Log to this sheet)

Operation Conducted: (Circle One)

Simultaneous
Storage to Ship

Rail to Ship
Rail to Storage

Weather Conditions:

Wind Speed:

Wind Direction:

Person Completing this Form and Date:

Action taken and / or explanation of why no excess dust emission occurred:

HAZARD COMMUNICATION PROGRAM

1.0 POLICY & REGULATORY REQUIREMENTS

The purpose of this program is to provide a safe working environment and ensure that the Kinder Morgan Bulk Terminals, Portland Terminal 4 (KMBT-4), is in compliance with the OSHA Hazard Communication Standard found in chapter 29 of the Code of Federal Regulations (29 CFR part 1910.1200, 1917, and/or 1918 as appropriate).

Important requirements and components of a written hazard communication program are:

(1) KMBT-4 shall develop, implement, and maintain at each workplace, a written hazard communication program which at least describes how the criteria of these regulations, labeling, material safety data sheets (MSDS) information and availability, and employee information and training will be met, and which also includes the following:

- A list of the hazardous chemicals known to be present using a name that is referenced on the appropriate MSDS; and,
- The methods KMBT-4 will use to inform employees of the hazards of non-routine tasks (for example, Confined Space Entry), and the hazards associated with products contained in the work place.

(2) KMBT-4 shall make the written hazard communication program available, upon request, to employees, ILWU workers, contractors, or regulatory agencies. This written program will be kept in the KMBT-4 office.

The Terminal Manager is the overall coordinator and responsible individual for the facility program along with Kinder Morgan Environmental, Health and Safety Manager. Each employee in the terminal will be advised of the substance of the Hazard Communications Program, the hazardous properties of materials they work with, and measures to be taken to protect themselves from over exposure to these materials. Terminal employees will also be required to review this written program.

2.0 LIST OF HAZARDOUS MATERIALS

The Terminal Manager maintains a list of all hazardous materials that employees are exposed to, and update the list as necessary. The hazardous materials list will be updated

upon receipt of new hazardous materials at the terminal. The list of hazardous materials is maintained in the KMBT-4 office.

3.0 MATERIAL SAFETY DATA SHEETS (MSDS)

The Terminal Manager will maintain an MSDS binder in the KMBT-4 office that includes substances at the terminal that are considered hazardous chemicals. The Terminal Manager will ensure that MSDS's are readily available to all employees on all shifts.

Management is responsible for acquiring and updating MSDS's. All outdated MSDS information will be retained for 30 years. Management or ILWU steady millwrights will review each MSDS for accuracy and completeness and will consult with the Regional EH&S Manager if additional research is necessary. All new procurements for the terminal must be cleared with the Terminal Manager. Whenever possible, the least hazardous substance will be procured.

The list of Hazardous Chemicals along with MSDS will be made available to contractors whose work on-site may create potential exposure. Likewise, contractors shall provide to the Terminal Manager a list of chemicals and respective MSDSs that, through the course of work, will be brought to the work site.

MSDS that meet the requirements of the Hazard Communication Standard must:

- Be fully completed and received at the terminal either prior to, or at the time of receipt of the first shipment of any potentially hazardous chemical purchased from a vendor or shipped from a customer;
- Be completed in English, and shall contain at least the following basic information;
 - The chemical and common name(s);
 - Physical and chemical characteristics of the hazardous chemical (such as vapor pressure, flash point, etc.);
 - The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity;
 - The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the chemical;
 - The primary route(s) of entry into the body (skin, inhaling, etc.);
 - The OSHA permissible exposure limit, ACGIH Threshold Limit Value, and any other exposure limit used or recommended by the chemical manufacturer preparing the material safety data sheet, where available;
 - Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Annual Report on Carcinogens (latest edition) or has been found to be a

potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by OSHA;

- Any generally applicable precautions for safe handling and use, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks;
- The name, address and telephone number of the chemical manufacturer, importer, other responsible party preparing or distributing the MSDS, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

4.0 LABELS AND OTHER FORMS OF WARNING

The label may be transmitted with the initial shipment itself, or with the MSDS that is to be provided prior to or at the time of the first shipment.

KMBT-4 management or ILWU steady millwrights are responsible for seeing that all hazardous chemicals are properly labeled prior to receiving them into the work area. Hazardous chemicals not labeled will not be accepted until they are properly labeled.

It shall be verified that all containers received for use will:

- Be clearly labeled as to the contents
- Note the appropriate hazard warning or alternatively, words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals; and,
- List the name and address of the manufacturer, importer, or responsible party

Chemicals put into other containers at any of our locations must be re-labeled unless the chemical is to be used by the one person who transferred it and it will be used up within one work shift.

The Steady ILWU Millwright Lead Man, with supervision from the management, will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or with a generic label which have a block for identity and blocks for the hazard warning. For help with labeling, please see or call the safety/health office at 285-4200 Ext. 20.

Labeling for transportation off-site must follow current Federal and State Department of Transportation (DOT) shipping label requirements (49 CFR, HM -181). See **Appendix I** for more DOT labeling information.

5.0 INFORMATION & TRAINING

KMBT-4 employees and ILWU Steady Millwrights will receive training on the Hazard Communication Standard and the safe use of those hazardous materials. Additional training will be provided for employees whenever a new hazard is introduced into their work area.

The training will emphasize these elements:

- This written program.
- Identifying physical and health hazards of site materials (see **Appendix II**).
- Procedures to protect against hazards, e.g., personal protective equipment, work practices, and emergency procedures.
- The location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and material safety data sheets, how to understand their content, and how employees may obtain and use appropriate hazard information.

The Terminal Manager will monitor and maintain records of employee training. Contractors working within the terminal will be given access to Terminal 4's hazard communication information, including hazardous chemicals they may be exposed to, PPE required, and MSDSs. The contractor shall be responsible for training their own employees.

6.0 HAZARDOUS NON-ROUTINE TASKS

Periodically, employees may perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee will be given information by their Supervisor about hazards to which they may be exposed during such an activity.

This information will include:

- Protective/Safety measures which must be used;
- Specific hazards; and,
- Measures KMBT has taken to lessen the hazards, such as: ventilation, respirators, presence of another employee, operating and emergency procedures.

Example of a non-routine task performed by employees of KMBT would be **Confined Space Entry**. Appropriate safety measures would include; safety permit completion (confined space), making sure there is an adequate air supply and a non explosive environment exists in the confined space and surrounding areas, and having other personnel involved as hole watch.

7.0 RIGHT TO KNOW

This policy has one primary goal, to keep you, your coworkers, and the public safe from hazardous materials. In order to do this, we are going to give you information that will:

- Help you identify hazardous materials
- Help you locate more information about these hazards
- Help you protect yourself from these materials

The hazard communication standard often referred to as Worker Right-to-Know Law or SARA Title III. The law is designed for those companies which manufacture the potentially hazardous materials (refiners or chemical manufacturers) as well as those who ship or handle the materials in any way.

The law states that chemical manufacturers and importers must evaluate materials to determine if they are hazardous in any way to employees who come in contact with them. These materials can be hazardous in two basic ways:

- **Health Hazard** - A chemical that is labeled a health hazard is one that can act on your body from inside to damage organs, such as a poisonous substance or a known cancer causing agent, or it can act on your body from outside and damage tissue, such as acid on the skin. Exposure to chemicals that are health hazards can do their damage rapidly (Acute Health Hazards) or they can affect the body slowly (Chronic Health Hazards).
- **Physical Hazard** - A physical hazard is a chemical that can damage your body from the outside, such as in an explosion. It is possible for a chemical can fall into all of these categories.

Common routes for exposure into the body are **ingestion, inhalation, absorption, and injection.**

The law goes on to ask employers to develop a plan for; communicating information to employees, ensure that labels are on containers of hazardous materials, give employees access to information about potentially hazardous materials, and to teach employees how to protect themselves.

7.1 Communication

This manual is one step in communicating information to employees. It summarizes the requirements of the Hazard Communication Standard and the responsibilities that the company has in keeping its employees informed.

Appendix II lists the site specific concerns of materials on site at KMBT-4. Training sessions are given annual for KMBT employees and steady ILWU workers to review the concerns of these products.

When new products are brought into the terminal, employees will be informed by management. In addition, MSDSs will be made available on these products. Employees are encouraged to review these MSDSs and ask questions of your Manager if there is anything that is not clear. If the product requires personal protective equipment, employees will be so informed and trained. Employees are encouraged to request additional information if they are not 100% sure of how to handle a product safely.

7.2 Access

A complete set of MSDS'S are located in the unit office lunchroom.

Employees are encouraged to ask for additional information about a product or about handling procedures, if they are uncertain of how to handle it.

Appendix I – DOT Labeling

We see many forms of labeling every day in our jobs. For example trucks we see on the highway that are carrying gasoline have a Department of Transportation (DOT) placard of 1203 - Flammable. The DOT requires that each motor vehicle or rail car containing any quantity of a hazardous substance must have warning labels on each end and each side. The Label consists of a number (for example, 1203 for gas) and a hazard category (for example, Flammable). The numbers and symbols will change according to the material and its classification. DOT's classification system uses nine hazardous classes:

- Class 1 – Explosives
- Class 2 – Gases
- Class 3 – Flammable Liquids
- Class 4 – Flammable Solids
- Class 5 – Oxidizers and Organic Peroxides
- Class 6 – Poison and Infectious Substances
- Class 7 – Radioactive Substances
- Class 8 – Corrosives
- Class 9 – Miscellaneous Materials

You may know from experience that 1203 Flammable is generally Gasoline. However, do you know the specific hazards of Gasoline from looking at this placard? You may correctly guess that Gasoline is highly flammable, but what happens if you get it on your skin? Or accidentally swallow some? You cannot tell by simply looking at the 1203 Flammable placard. You need to review the MSDS.

Drums may have placarding and colored "diamond" labels. These diamonds are actually NFPA (National Fire Protection Association) codes derived for fire fighting applications. This system is made up of color-coded numbers which indicate the level of health, fire, and instability hazard present.

The system provides simple, readily recognizable and easily understood markings which will give, at a glance, a general idea of the hazards of any material.

Here's how the system works;

- The Blue section indicates the degree of Health Hazard. The numbers in this section range from 0 to 4 depending on the degree to which the product is a health hazard.
 - A marking of 0 would mean that the product represents little or no health hazard.
 - A 1 is slightly hazardous and may require respiratory protection.
 - A 2 is hazardous and typically requires SCBA.

- A 3 is extremely dangerous and requires full protective clothing plus SCBA.
- A 4 would poses a severe health hazard. Generally, products which can have a caustic and corrosive effect on organic tissue are considered severe health hazards. For example, Hydrochloric Acid has a health hazard marking of 4.
- The Red section indicates the degree of Flammability. The numbers in this section also range from 0 to 4 depending on the degree to which the product is a fire hazard.
 - A marking of 0 means the product will not burn and is not a fire hazard.
 - A 1 must be preheated to burn.
 - A 2 will ignite when heated.
 - A 3 can ignite at normal temperatures.
 - A 4 would mean that the product is extremely flammable, such as Gasoline.
- The Yellow section indicates the degree of Instability (i.e. reactivity). The numbers in this section range from 0 to 4 depending on the degree to which the product is unstable.
 - A marking of 0 would mean that the product is stable and under normal conditions will not react with other materials. Gasoline has a reactivity marking of 0.
 - A 1 can be unstable if heated, and caution is required.
 - A 2 may undergo a violent chemical change.
 - A 3 may detonate if heated or shocked.
 - A 4 would means the product is highly unstable and can violently react and detonate under normal conditions.
- The White section contains special hazard information for unique products and characteristics such as; water reactive, oxidizers, radiation hazard, heat or shock sensitive and hazardous polymerization.
- DOT numbers and NFPA markings. From these labels we may be able to guess what is in a given container or truck, however, we haven't answered our original question. What happens if you get some of the product on your skin? Or accidentally swallow some? As a result, these labels may not sufficient when it comes to protecting our employees. You still need to refer to the MSDS for this more specific information

Appendix II – Material Site Specific Hazards at KMBT-4

Following are some of the major site specific hazards that employees may be exposed to while working at the KMBT-4 terminal. For more detailed information, see the MSDS.

The main material stored at KMBT-4 is Soda Ash. The main concern with Soda Ash is respiratory protection if working in a dusty environment.

Soda Ash (Sodium Carbonate)

Over exposure to Soda Ash Dust may result in:

- Moderate nose & skin irritation
- Severe eye irritation, See MSDS for proper treatment of over exposure.

Respiratory protection: for dusty conditions, particulate disposable mask is adequate. Protective clothing and eye protection should be used to protect from skin or eye irritation.

Sulfuric Acid – 93% Concentration

The sulfuric acid 330 gallon capacity tank (nested inside secondary containment) is located outside the south wall of the maintenance shop building # 432. All sulfuric related equipment is serviced by Northstar Chemical, Inc. See Accidental Spill Prevention Plan in main office for procedures to follow in the event of a spill. If a spill of sulfuric acid occurs, regardless of how small a quantity, the Kinder Morgan Terminal Spill Response Procedures shall be fully implemented, which includes contacting NRC Environmental Services (Formerly FOSS Environmental) at (503) 283-1150.

Some hazardous products are used in very small quantities in the maintenance shop. Please read MSDSs and become aware of concerns when using these products. The majority of these products can be put into the following category:

Combustible or Flammable Hydrocarbons

Hydrocarbon liquids or gases have a number of concerns:

- burn and/or explode when mixed with the correct amount of air and exposed to an ignition source
- Cause irritation with contact to any mucous membrane

General Items Commonly Stored On Site

Acetylene
Argon
Diesel Fuel #2
Gasoline
Refined Mineral Oil
Oxygen
Propane
Various Paints

Page 10 of 10

Brake Fluid

Biodegradable Degreaser and Cleaner

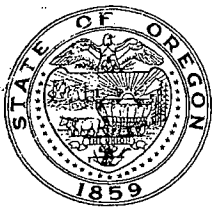
Paint Thinner

Penetrating Lubricant (WD-40), Kroil Penetrating Lubricant

Assorted Petroleum based Lubricants

Revised 5/19/2010

KMB00000342



Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4th Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

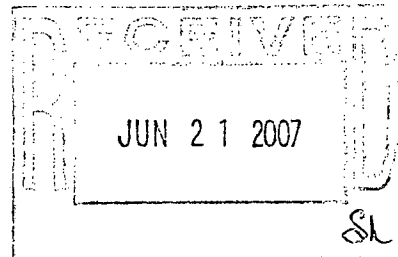
FAX (503) 229-6957

TTY (503) 229-5471

8 June 2007

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Brad Clinefelter
Terminal Manager
Kinder Morgan, Portland Bulk Terminal
11040 N Lombard
Portland OR 97203



Re: NPDES Permit
File No. 100025
Kinder Morgan, Portland Bulk Terminal
Multnomah County

We have completed our review of your permit application and the comments received regarding the preliminary draft permit which was mailed to you for review on 4 April 2007, and have issued the enclosed National Pollutant Discharge Elimination System Permit.

This permit will be considered the final action on permit application number 977632.

If you are dissatisfied with the conditions or limitations of this permit, you have 20 days to request a hearing before the Environmental Quality Commission or its authorized representative. Any such request shall be made in writing to the Director and shall clearly state the grounds for the request.

You are urged to carefully read the permit and take all possible steps to comply with conditions established.

Should you have any questions regarding this permit, please contact Elliot Zais at 503/229-5292.

Sincerely,

Neil Mullane, Manager
Water Quality Source Control Program
Northwest Region

Enclosure: NPDES permit
cc: File



KMB00000343

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

WASTE DISCHARGE PERMIT
Department of Environmental Quality
Northwest Region Office
2020 Southwest Fourth Avenue, Portland, OR 97201-4987
Telephone: (503) 229-5263

Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

ISSUED TO:

Kinder Morgan Bulk Terminals, Inc.
11040 N Lombard
Portland OR 97203

SOURCES COVERED BY THIS PERMIT:

<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
Stormwater, equipment wash water	001	RM 4.6

PLANT TYPE AND LOCATION:

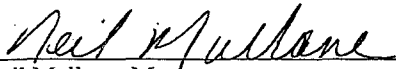
Marine cargo handling facility
Terminal 4, Port of Portland
Portland, Oregon

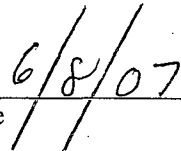
RECEIVING STREAM INFORMATION:

Basin: Willamette
Sub-Basin: Lower Willamette
Stream: Willamette River
LLID/RM 1227618456580/4.6
County: Multnomah

EPA REFERENCE NUMBER: OR 004079-7

Issued in response to Application No. 977632 received 24 July 2006


Neil Mullane, Manager
Water Quality Source Control, Northwest Region


Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify or operate a waste water collection, treatment, control and disposal system and discharge to public waters adequately treated waste waters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

	<u>Page</u>
Schedule A - Waste Discharge Limitations not to be Exceeded.....	2
Schedule B - Minimum Monitoring and Reporting Requirements.....	6
Schedule C - Compliance Conditions and Schedules.....	8
Schedule D - Special Conditions.....	9
Schedule F - General Conditions.....	10

Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge of waste is prohibited, including discharge to waters of the state or an underground injection control system.

SCHEDULE A
STORMWATER POLLUTION CONTROL PLAN

1. **Preparation and Implementation of the Stormwater Pollution Control Plan (SWPCP).** See the DEQ document *Guidance Document for Preparation of the NPDES Stormwater Pollution Control Plan*, NWR Revision October 2001.
 - a) The SWPCP shall be prepared by a person knowledgeable in stormwater management and familiar with the facility.
 - b) The SWPCP shall be signed in accordance with 40 CFR §122.22. Updates and revisions to the SWPCP shall also be signed in this manner. The SWPCP shall be signed by a principal executive officer of at least the level of vice president.
 - c) *The SWPCP shall be prepared and implemented according to the time frames set forth in Schedule C.*
 - d) The SWPCP shall be kept current and updated as necessary to reflect any changes in facility operation.
 - e) The SWPCP and updates to the SWPCP shall be submitted to the Department in accordance with Schedule B.2.
 - f) A copy of the SWPCP shall be kept at the facility and made available upon request to government agencies responsible for stormwater management in the permittee's area.
2. **Stormwater Pollution Control Plan Requirements**
 - a) **Site Description** The SWPCP shall contain the following information:
 - i) A description of the industrial activities conducted at the site. Include a description of the significant materials (see Schedule D.3, Definitions) that are stored, used, treated and/or disposed of in a manner that allows exposure to stormwater. Also describe the methods of storage, usage, treatment and/or disposal.
 - ii) A general location map showing the location of the site in relation to surrounding properties, transportation routes, surface waters and other relevant features.
 - iii) A site map including the following:
 - (1) drainage patterns
 - (2) drainage and discharge structures
 - (3) outline of the drainage area for each stormwater outfall
 - (4) paved areas and buildings within each drainage area
 - (5) areas used for outdoor manufacturing, treatment, storage, and/or disposal of significant materials
 - (6) existing structural control measures for reducing pollutants in stormwater runoff
 - (7) material loading and access areas
 - (8) hazardous waste treatment, storage and disposal facilities
 - (9) location of wells including waste injection wells, seepage pits, drywells, etc.
 - (10) location of springs, wetlands, and other surface water bodies.
 - iv) Estimates of the amount of impervious surface area (including paved areas and building roofs) relative to the total area drained by each stormwater outfall.
 - v) For each area of the site where a reasonable potential exists for contributing pollutants to stormwater runoff, identify the potential pollutants that could be present in stormwater discharges.
 - vi) The name(s) of the receiving water(s) for stormwater drainage. If drainage is to a municipal storm sewer system, the name(s) of the ultimate receiving waters and the name of the municipality.
 - vii) Identification of the discharge outfall(s) and the point(s) where stormwater monitoring will occur as required by Schedule B. If multiple discharge outfalls exist but will not all be monitored (as allowed in Schedule B.1.c), a description supporting this approach shall also be included.
 - b) **Site Controls** The permittee shall maintain existing controls and/or develop new controls appropriate for the site. The purpose of these controls is to eliminate or minimize the exposure of pollutants to stormwater. In developing a control strategy, the SWPCP shall have the following minimum components. A description of each component shall be included in the SWPCP.
 - i) *Stormwater Best Management Practices* If technically and economically feasible, the following best management practices shall be employed at the site. A schedule for implementation of these practices shall be included in the SWPCP if the practice has not already been accomplished. This schedule must be consistent with the requirements for developing and implementing the SWPCP in Schedule C of the permit.
 - (1) Containment - All hazardous materials (see Schedule D.3, Definitions) shall be stored within berms or other secondary containment devices to prevent leaks and spills from contaminating stormwater. If the use of berms or secondary containment devices is not possible, then hazardous materials shall be stored in areas that do not drain to the storm sewer system.

- (2) Oil and Grease - Oil/Water separators, booms, skimmers, or other methods shall be employed to eliminate or minimize oil and grease contamination of stormwater discharges.
 - (3) Waste Chemicals and Material Disposal - Wastes shall be recycled or properly disposed of in a manner to eliminate or minimize exposure of pollutants to stormwater. All waste contained in bins or dumpsters where there is a potential for drainage of stormwater through the waste shall be covered to prevent exposure of stormwater to these pollutants. Acceptable covers include, but are not limited to, storage of bins or dumpsters under roofed areas and use of lids or temporary covers such as tarps.
 - (4) Erosion and Sediment Control - Erosion control methods such as vegetating exposed areas, graveling or paving shall be employed to minimize erosion of soil at the site. Sediment control methods such as detention facilities, sediment control fences, vegetated filter strips, bioswales, or grassy swales shall be employed to minimize sediment loads in stormwater discharges. For activities that involve land disturbance, the permittee shall contact the local municipality to determine if there are other applicable requirements.
 - (5) Debris Control - Screens, booms, settling ponds, or other methods shall be employed to eliminate or minimize debris in stormwater discharges.
 - (6) Stormwater Diversion - Stormwater shall be diverted away from fueling, manufacturing, treatment, storage, and disposal areas to prevent exposure of uncontaminated stormwater to potential pollutants.
 - (7) Covering Activities - Fueling, manufacturing, treatment, storage, and disposal areas shall be covered to prevent exposure of stormwater to potential pollutants. Acceptable covers include, but are not limited to, permanent structures such as roofs or buildings and temporary covers such as tarps.
 - (8) Housekeeping - Areas that may contribute pollutants to stormwater shall be kept clean. Sweeping, prompt clean up of spills and leaks, and proper maintenance of vehicles shall be employed to eliminate or minimize exposure of stormwater to pollutants.
 - (9) The following BMPs will be implemented as quickly as feasible.
 - a. Daily vacuum pick-up of spilled or leaked soda ash during rail and barge/ship loading/unloading operations.
 - b. Twice daily inspections around material handling equipment that may be conveying soda ash for leakage and spills with immediate clean up of any spill of leakage discovered.
 - c. The piles of soda ash left in the rail right-of-way within the drainage basin of the outfall need to be cleaned up regularly.
- ii) *Spill Prevention and Response Procedures* Methods to prevent spills along with clean-up and notification procedures shall be included in the SWPCP. These methods and procedures shall be made available to appropriate personnel. The required clean up material shall be on-site or readily available. Spills prevention plans required by other regulations may be substituted for this provision providing that stormwater management concerns are adequately addressed.
- iii) *Preventative Maintenance* A preventative maintenance program shall be implemented to ensure the effective operation of all stormwater best management practices. At a minimum the program shall include:
- (1) Monthly inspections of areas where potential spills of significant materials or industrial activities could impact stormwater runoff.
 - (2) Monthly inspections of stormwater control measures, structures, catch basins, and treatment facilities.
 - (3) Cleaning, maintenance, and/or repair of all materials handling and storage areas and all stormwater control measures, structures, catch basins, and treatment facilities as needed upon discovery.
- iv) *Employee Education* An employee orientation and education program shall be developed and maintained to inform personnel of the components and goals of the SWPCP. The program shall also address spill response procedures and the necessity of good housekeeping practices. A schedule for employee education shall be included in the SWPCP.
- c) **Record Keeping and Internal Reporting Procedures** The following information shall be recorded and maintained at the facility and provided to the Department and other government agencies upon request. This information does not need to be submitted as part of the SWPCP.
- i) Inspection, maintenance, repair, and education activities as required by the SWPCP.
 - ii) Spills or leaks of significant materials that impacted or had the potential to impact stormwater or surface waters. Include the corrective actions to clean up the spill or leak as well as measures to prevent future problems of the same nature.

ADDITIONAL REQUIREMENTS

3. **Oregon Administrative Rule (OAR) 340-44-50, Waste Disposal Wells for Surface Drainage** OAR 340-44-50 requires that waste disposal wells for storm drainage only be used in those areas where there is an adequate confinement barrier or filtration medium between the well and an underground source of drinking water; and where construction of surface discharging storm sewers is not practical. In addition, this rule requires the following:
- New storm drainage disposal wells shall be as shallow as possible but shall not exceed a depth of 100 feet.
 - Disposal wells shall be located at least 500 feet from domestic water wells.
 - Using a disposal well for agricultural drainage is prohibited.
 - Using a disposal well for surface drainage in areas where toxic chemicals or petroleum products are stored or handled is prohibited unless there is containment around the product area which will prevent spills and leaks from entering the well.
 - Any owner or operator of the disposal well shall have available a means of temporarily plugging or blocking the well in the event of an accident or spill.
 - Any area that is drained by a disposal well shall be kept clean of petroleum products and other organic or chemical wastes as much as practicable to minimize the degree of contamination of the stormwater drainage.
4. **Oregon Administrative Rule 340-41-26(3)(a)(D), Surface Water Temperature Management Plan** Individual stormwater discharges are not expected to cause a measurable increase in stream temperature. Compliance with this permit meets the requirement of OAR 340-41-26(3)(a)(D) to develop and implement a surface water temperature management plan. If it is determined that storm discharges in a particular basin are impacting a Total Maximum Daily Load for temperature, then permittees in this basin will be required to implement additional management practices to reduce the temperature of the discharges. These practices include, but are not limited to, increased vegetation to provide for shading, underground conveyance systems or detention vaults, and filter treatment systems to reduce detention times.
5. **Stormwater Only** This permit only regulates the discharge of stormwater. It does not authorize the discharge or on-site disposal of process wastewater, wash water, boiler blowdown, cooling water, air conditioning condensate, deicing residues, or any other non-storm discharges associated with the facility.
- Any other wastewater discharge or disposal must be permitted in a separate permit. A separate Department permit may not be required if the wastewater is reused or recycled without discharge or disposal, or discharged to the sanitary sewer with approval from the local sanitary authority.
6. **Specific River Basin Requirements** The permittee shall comply with any Oregon Administrative Rule requirements for stormwater management specific to the applicable river basin.
7. **Water Quality Standards** The ultimate goal for permittees is to comply with water quality standards in OAR 340-41. In instances where a stormwater discharge adversely impacts water quality, the Department may require the facility to implement additional management practices, apply for an individual permit, or take other appropriate action.

STORMWATER DISCHARGE LIMITATIONS

These daily maximum effluent limits are to be met at the end of each stormwater discharge pipe.

Parameter	Limit
Total Copper	100 µg/L
Total Lead	120 µg/L
Total Zinc	300 µg/L
pH	6.5 - 11 SU
Total Suspended Solids	130 mg/L
Oil & Grease	10 mg/L
Floating Solids (associated with industrial activities)	No Visible Discharge
Oil & Grease Sheen	No Visible Sheen

8. Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which will violate Water Quality Standards as adopted in OAR 340-41-445 except within a mixing zone in Wheeler Bay. The mixing zone is a strip 3 meters wide extending downstream for 3 meters from the point of discharge.
-

SCHEDULE B**Minimum Monitoring and Reporting Requirements (unless otherwise approved in writing by the Department)****1. Minimum Monitoring Requirements**

- a) The permittee shall monitor stormwater associated with industrial activity for the following:

GRAB SAMPLES OF STORMWATER	
Parameter	Frequency
Total Copper	Monthly from October through May
Total Lead	Monthly from October through May
Total Zinc	Monthly from October through May
pH	Monthly from October through May
Total Suspended Solids	Monthly from October through May
Oil & Grease	Monthly from October through May

*No testing
June through Sep.*

VISUAL MONITORING OF STORMWATER	
Parameter	Frequency
Floating Solids (associated with industrial activities)	Once a Month (when discharging)
Oil & Grease Sheen	Once a Month (when discharging)

- b) **Grab Samples** Grab samples that are representative of the discharge shall be taken monthly. Compositing of samples from different drainage areas is not allowed.
- c) **Multiple Point Source Discharges** The permittee may reduce the number of stormwater monitoring points provided the outfalls have substantially identical effluents. Substantially identical effluents are discharges from drainage areas serving similar activities where the discharges are expected to be similar in composition. Outfalls serving areas with no exposure of stormwater to industrial activities are not required to be monitored.
- d) **Monitoring Location** All samples shall be taken at monitoring points specified in the SWPCP before the stormwater joins or is diluted by any other wastestream, body of water or substance.
- e) **No Exposure** If there is no exposure of stormwater to material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery at the site, monitoring is not required. The permittee shall submit an annual statement certifying as such in lieu of monitoring (refer to Schedule B.2.b). If exposure cannot be prevented, the permittee shall comply with Schedule B.
- f) **Reinstatement of Monitoring Requirements**
- The permittee shall conduct monitoring as specified in Schedule B.1 if changes to site conditions are expected to impact stormwater discharge characteristics.
 - The Department may reinstate monitoring requirements as specified in Schedule B.1 if prior monitoring efforts were improper or results were incorrect.
 - Monitoring may also be reinstated if future sampling efforts indicate benchmarks are being exceeded.
2. **Reporting Requirements** The permittee shall submit the following to the appropriate DEQ regional office:
- a) **Monitoring Data** Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department by the 15th day of the following month. If there was insufficient rainfall in a given month to collect samples, the permittee shall notify the Department by the 15th of the following month.

- b) **No Exposure Certification** The permittee shall submit an annual certification by July 15 of each year if monitoring is not required due to no exposure of stormwater to industrial activities. The certification shall state that site conditions have been evaluated and the facility meets the requirements of Schedule B.1.e
- c) **SWPCP Update/Completion** The permittee shall prepare or update the SWPCP in accordance with Schedule C of the permit. The permittee shall submit an updated or completed SWPCP within 14 days after completion.

2 Weeks after 9-8-07

Sept. 8, 2007

(Permit is dated 6-3-07 so just use that date to be safe)

File Number: 100025

Page 8 of 15 Pages

SCHEDULE C
Compliance Conditions and Schedule

1. Not later than 90 days after receiving this permit, the existing permittee must revise and begin implementation of the SWPCP to meet any new permit requirements.
2. Except for site controls that require capital improvements (see Schedule D.3, Definitions), the SWPCP must be implemented within 90 days after revision of SWPCP. Site control activities that require capital improvements must be completed in accordance with the schedule set forth in the SWPCP.

SCHEDULE D
Special Conditions

1. **Releases in Excess of Reportable Quantities.** This permit does not relieve the permittee of the reporting requirements of 40 CFR §117 Determination of Reportable Quantities for Hazardous Substances and 40 CFR §302 Designation, Reportable Quantities, and Notification.
2. **Availability of SWPCP and Monitoring Data.** The Stormwater Pollution Control Plan and/or stormwater monitoring data shall be made available to government agencies responsible for stormwater management in the permittee's area.
3. **Definitions**
 - a) *Capital Improvements* means the following improvements that require capital expenditures:
 - i) Treatment best management practices including but not limited to settling basins, oil/water separation equipment, catch basins, grassy swales, and detention/retention basins.
 - ii) Manufacturing modifications that incur capital expenditures, including process changes for reduction of pollutants or wastes at the source.
 - iii) Concrete pads, dikes and conveyance or pumping systems utilized for collection and transfer of stormwater to treatment systems.
 - iv) Roofs and appropriate covers for manufacturing areas.
 - b) *Hazardous Materials* as defined in 40 CFR §302 Designation, Reportable Quantities, and Notification.
 - c) *Material Handling Activities* include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.
 - d) *Point Source* means a discharge from any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, or conduit.
 - e) *Significant Materials* includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges.
4. Washing of ship loading equipment is hereby permitted under this permit provided that Best Management Practices described in Schedule A are employed to minimize the amount of product that may be carried into the river.

SCHEDULE F
NPDES GENERAL CONDITIONS

SECTION A. STANDARD CONDITIONS1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of the Clean Water Act, Oregon Revised Statutes (ORS) 468B.025, and 40 Code of Federal Regulations (CFR) Section 122.41(a), and grounds for an enforcement action. Failure to comply is also grounds for the Department to modify, revoke, or deny renewal of a permit.

2. Penalties for Water Pollution and Permit Condition Violations

ORS 468.140 allows the Department to impose civil penalties up to \$10,000 per day for violation of a term, condition, or requirement of a permit. Additionally 40 CFR 122.41 (A) provides that any person who violates any permit condition, term, or requirement may be subject to a federal civil penalty not to exceed \$25,000 per day for each violation.

Under ORS 468.943 and 40 CFR 122.41(a), unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to \$25,000 or by imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense.

Under ORS 468.946, a person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a Class B felony punishable by a fine not to exceed \$200,000 and up to 10 years in prison. Additionally, under 40 CFR 122.41(a) any person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a federal civil penalty not to exceed \$100,000, and up to 6 years in prison.

3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

The Department may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any term, condition, or requirement of this permit, a rule, or a statute
- b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge
- d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a Total Maximum Daily Load (TMDL)
- e. New information or regulations
- f. Modification of compliance schedules
- g. Requirements of permit reopener conditions
- h. Correction of technical mistakes made in determining permit conditions
- i. Determination that the permitted activity endangers human health or the environment
- j. Other causes as specified in 40 CFR 122.62, 122.64, and 124.5

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

8. Permit References

Submit Before 11-30-11
Complete Renewal Before 11-1-11

Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act and OAR 340-041-0033 for toxic pollutants, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

9. Permit Fees

The permittee must pay the fees required by Oregon Administrative Rules.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation or the diversion is due to nonuse of nonessential treatment units or processes at the treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.

- (1) Bypass is prohibited unless:
 - (a) Bypass was necessary to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
 - (c) The permittee submitted notices and requests as required under General Condition B.3.c.
- (2) The Department may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Department determines that it will meet the three conditions listed above in General Condition B.3.b.(1).

c. Notice and request for bypass.

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to the Department at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D.5.

4. Upset

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and
 - (4) The permittee complied with any remedial measures required under General Condition A.3 hereof.

- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
5. Treatment of Single Operational Upset
For purposes of this permit, A Single Operational Upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.
6. Overflows from Wastewater Conveyance Systems
 - a. Definitions
 - (1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system through a designed overflow device or structure, other than discharges to the wastewater treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system which causes it to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
 - (3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure.
 - b. Prohibition of overflows. Overflows are prohibited unless:
 - (1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the overflows, such as the use of auxiliary conveyance systems, or maximization of conveyance system storage; and
 - (3) The overflows are the result of an upset as defined in General Condition B.4. and meeting all requirements of this condition.
 - c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.
 - d. Reporting required. Unless otherwise specified in writing by the Department, all overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.
7. Public Notification of Effluent Violation or Overflow
If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the Department, the permittee must take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.
8. Removed Substances
Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling
Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and shall be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points may not be changed without notification to and the approval from the Department.
2. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.
3. Monitoring Procedures
Monitoring must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in this permit.
4. Penalties of Tampering
The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than \$10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.
5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permittee
If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 part CFR 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value must be recorded unless otherwise specified in this permit.
7. Averaging of Measurements
Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which shall be averaged as specified in this permit.
8. Retention of Records
The permittee must retain records of all monitoring information, including: all calibration, maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Department at any time.
9. Records Contents
Records of monitoring information must include:
 - a. The date, exact place, time, and methods of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
10. Inspection and Entry
The permittee must allow the Department or an authorized representative upon the presentation of credentials to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
 - d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes
The permittee must comply with OAR chapter 340, division 52, "Review of Plans and Specifications" and 40 CFR Section 122.41(l) (1). Except where exempted under OAR chapter 340, division 52, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by the Department. The permittee must give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.
2. Anticipated Noncompliance
The permittee must give advance notice to the Department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
3. Transfers
This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit may be transferred to a third party without prior written approval from the Department. The Department may require modification, revocation, and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act (see 40 CFR Section 122.61; in some cases, modification or revocation and reissuance is mandatory). The permittee must notify the Department when a transfer of property interest takes place.
4. Compliance Schedule
Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.
5. Twenty-Four Hour Reporting
The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permittee becomes aware of the circumstances. During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

A written submission must also be provided within 5 days of the time the permittee becomes aware of the circumstances. Pursuant to ORS 468.959 (3) (a), if the permittee is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days of the time the permittee becomes aware of the circumstances. The written submission must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected;
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
- e. Public notification steps taken, pursuant to General Condition B.6

The following must be included as information that must be reported within 24 hours under this paragraph:

- f. Any unanticipated bypass that exceeds any effluent limitation in this permit;
- g. Any upset that exceeds any effluent limitation in this permit;
- h. Violation of maximum daily discharge limitation for any of the pollutants listed by the Department in this permit; and
- i. Any noncompliance that may endanger human health or the environment.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information

The permittee must furnish to the Department within a reasonable time any information that the Department may request to determine compliance with this permit. The permittee must also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to the Department, it must promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department must be signed and certified in accordance with 40 CFR Section 122.22.

9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed \$100,000 per violation and up to 5 years in prison. Additionally, according to 40 CFR 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a federal civil penalty not to exceed \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

10. Changes to Discharges of Toxic Pollutant

The permittee must notify the Department as soon as it knows or have reason to believe of the following:

- a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Section 122.21(g)(7); or
 - (4) The level established by the Department in accordance with 40 CFR Section 122.44(f).
- b. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Section 122.21(g)(7); or
 - (4) The level established by the Department in accordance with 40 CFR Section 122.44(f).

SECTION E. DEFINITIONS

1. *BOD* means five-day biochemical oxygen demand.

2. TSS means total suspended solids.
3. "Bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
4. FC means fecal coliform bacteria.
5. Total residual chlorine means combined chlorine forms plus free residual chlorine.
6. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR Section 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR Chapter 340, Division 41.
7. mg/l means milligrams per liter.
8. kg means kilograms.
9. m³/d means cubic meters per day.
10. MGD means million gallons per day.
11. 24-hour Composite sample means a combination of at least six discrete sample aliquots of at least 100 milliliters, collected at periodic intervals from the same location, during the operating hours of the facility over a 24 hour period. Four (rather than six) aliquots should be collected for volatile organics analyses. The composite must be flow or time proportional, whichever is more appropriate. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
12. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
13. Quarter means January through March, April through June, July through September, or October through December.
14. Month means calendar month.
15. Week means a calendar week of Sunday through Saturday.



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 N. Burlington Avenue, Bldg. 217, Portland, Oregon 97203 • Dan Saltzman, Commissioner • Dean Marriott, Director

Expiration Date : 8/1/2015

Permit Number: 400.027

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WASTEWATER DISCHARGE PERMIT

ISSUED TO: Kinder Morgan Bulk Terminal #4

SIC CODE: 4491

PLANT TYPE: Marine Cargo Handling

EPA CATEGORY: 400 General

LOCATION: 11040 N. Lombard St.
Portland, Oregon 97203

MAILING ADDRESS: PO BOX 83838
Portland, Oregon 97283

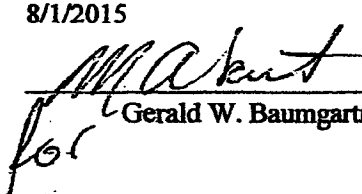
RESPONSIBLE OFFICIAL: W.G. Henderson

PHONE NUMBER: (403) 514-6638

FAX NUMBER:

EXPIRATION DATE: 8/1/2015

INDUSTRIAL SOURCE
CONTROL MANAGER


Gerald W. Baumgartner

9-2-10
Effective Date

PREPARED BY: AC

CHECKED BY :

MA >

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INTRODUCTION

PERMITTED ACTIVITIES

The permittee is authorized to discharge industrial wastewater to the City of Portland's sewer system in compliance with Chapter 17.34 of the City Code, the Bureau of Environmental Services Administrative Rules and any applicable provisions of federal or state laws or regulations and in accordance with discharge point(s), effluent limitations, monitoring requirements, and all other conditions set forth herein.

It is the permittee's duty to comply with all conditions of this permit. Any noncompliance with permit requirements constitutes a violation of Chapter 17.34 of Portland's City Code and, as such, subjects the permittee to enforcement action(s).

**SCHEDULE A
WASTEWATER DISCHARGE LIMITATIONS**

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**Schedule A
WASTEWATER DISCHARGE LIMITATIONS**

Listed below are the waste discharge limitations not to be exceeded after the permit effective date. Applicable regulations include Chapters 17.34 (Schedule F of this permit lists the General Discharge Prohibitions) and 17.36 of the Code of the City of Portland and 40 CFR 400.027. The point of compliance with the discharge limitations shall be 1A (Sampling manhole outside of KMT-4 maintenance shop).

POC (*)	Pollutant Name	Local Limit Daily Max (mg/L)	Categorical Limit (mg/Lmg/L, lb / off lb)	
			Daily	Monthly
	<u>METALS</u>			
	Arsenic	0.2		
	Cadmium	0.7		
	Chromium	5.0		
	Copper	3.7		
	Lead	0.7		
	Mercury	0.010		
	Molybdenum	1.4		
	Nickel	2.8		
	Selenium	0.6		
	Silver	0.4		
	Zinc	3.7		
	<u>NON-METALS (INORGANICS)</u>			
	Cyanide	1.2		
*	pH	5.0-11.5 su		
*	Total Dissolved Solids	3500 lbs/day		
	<u>NON-METALS (ORGANICS)</u>			
	1,2-Dichloroethane	0.50		
	2,4-Dinitrotoluene	0.13		
	Acrylonitrile	1.00		
	Chlordane	0.03		
	Chlorobenzene	0.20		
	Chloroform	0.20		
	Nitrobenzene	2.00		
	Pentachlorophenol	0.04		
	Trichloroethylene	0.20		
*	Non-polar Oil & Grease	110		

Notes:

1. This schedule may be revised upon written notification by the City to accommodate process changes by the permittee or as determined by the Director of Environmental Services.
2. In addition to the limits stated in Schedule A, the permittee shall comply with all other applicable City, State and Federal regulations.

**SCHEDULE A
WASTEWATER DISCHARGE LIMITATIONS**

Expiration Date : 8/1/2015
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3. The pollutant parameters marked with an asterisk (*) are the pollutants of concern. At a minimum, the permittee is required to monitor for pollutants of concern. All limits are applicable at the point of compliance.
4. The permittee is required to meet the **MOST** stringent limitation listed, denoted in bold type in the above table, when comparing the *Local Limit* column with the *Categorical Limit* column.
5. The TDS limitation of 3500 lbs/day, for a 24-hour period, is a permit specific limit developed and implemented in accordance with Bureau of Environmental Services Administrative Rules, Section II (4)). Only composite samples collected over a 23 to 25 hour period will be deemed representative for this TDS limitation. *This TDS limit was increased on July 1, 2008.*
6. The City has Pollutant Prohibitions for certain individual organic compounds that are not amenable to biological treatment or that have a screening value or local limit that is less than the practical method detection level (MDL). Discharges containing concentrations of a prohibited pollutant above the MDL, as listed in Appendix 5, is a violation of City Code and this permit.

**SCHEDULE B
MONITORING AND
REPORTING REQUIREMENTS**

Expiration Date: 8/1/2015
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**Schedule B
MONITORING AND
REPORTING REQUIREMENTS**

II. Periodic Compliance Self-Monitoring Report

Parameter	Sample Type	First Quarter			Second Quarter			Third Quarter			Fourth Quarter		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Non Metals													
	Composite												
Total Dissolved Solids		✓			✓			✓			✓		
	Grab												
pH		✓			✓			✓			✓		
Oil and Grease (total)		✓						✓					
Due Dates		Feb 15	Mar 15	Apr 15	May 15	Jun 15	Jul 15	Aug 15	Sept 15	Oct 15	Nov 15	Dec 15	15

II. Periodic Compliance Self-Monitoring Report, Notes:

1. Periodic Compliance Reports are to be submitted to the Industrial Source Control Division by the 15th of the month following the conclusion of the reporting period. Sampling, analysis, and reporting will follow the schedule above.
2. All official sampling shall be taken at the approved sampling location. (See Appendix 2: sampling location map.)
3. The permittee shall analyze samples for all listed parameters plus any other which might be expected to be present in significant quantities.
4. The permittee shall submit all self-monitoring results to the Industrial Source Control Division as part of their monitoring and reporting requirements.

**SCHEDULE B
MONITORING AND
REPORTING REQUIREMENTS**

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5. All monitoring results are to be mailed to:

Industrial Source Control Division
Bureau of Environmental Services
City of Portland
6543 N. Burlington Ave.
Portland, OR 97203

6. Periodic Compliance Reports are to be submitted by the 15th of each month following the report period for each sampling location. The reports shall consist of:

- a. Statement of compliance/noncompliance, signed by the officially designated contact person (statement is found on bottom of the self-monitoring report form).
- b. Sample analysis results recorded on the appropriate self-monitoring report form and chain of custody for sample collected.
- c. Originals of all laboratory analysis sheets showing who analyzed sample, date and time sample was analyzed, analytical methods used, method detection limit, test result, and quality assurance/quality control.
- d. Copies of pH charts (if any) showing violations (if any).
- e. Any other reports that may be required.
- f. Calculations of monthly average, if appropriate.

7. The permittee shall instruct its laboratory that, if the oil and grease (total) concentration exceeds 110 mg/L, the laboratory must determine the concentrations of the polar and non-polar oil and grease fractions.

8. The City may reduce or increase the frequency of sampling, based on the analytical results submitted.

9. As per 40 CFR 403.12(g)(6), if an industrial user subject to the reporting requirements of Schedule B monitors any parameter from the official sampling location more frequently than required, using procedures specified in Schedule E14(c), the results of their monitoring must be submitted in the required report.

SCHEDULE C
COMPLIANCE SCHEDULE

Expiration Date: 8/1/2015
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Schedule C
COMPLIANCE SCHEDULE

**SCHEDULE D
SPECIAL CONDITIONS**

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**Schedule D
SPECIAL CONDITIONS**

1. **Kinder Morgan Bulk Terminal #4 is required to discharge wastewater from their facility at a consistent rate throughout the day (24 hours) in order to minimize slug loads that could potentially impact the Columbia Blvd Wastewater Treatment Plant.**

2. pH

The Industrial Source Control Division has approved the method of monitoring of the wastewater pH at the time of discharge to the City Sewer system. This approval may be revoked at any time, if pH data are not representative of the sampling data obtained from the sampling manhole. To ensure that the basic City monitoring and reporting requirements are met, the permittee shall include a summary of significant pH excursions with its monthly reporting of parameters listed in Schedule B. This is in addition to the mandatory reporting of discharge violations within 24 hours of learning of these violations.

Significant excursions are defined as:

- a. pH excursions $> 11.5, \leq 12.5$ for a total duration of more than 15 minutes in any calendar day.
- b. pH excursions > 12.5 for a total duration of more than 5 minutes in any calendar day.
- c. pH excursions less than 5.0 regardless of duration during a calendar day.

Each occurrence shall be reported with the date, time, duration and the maximum or minimum pH excursion reached. The monthly report shall contain the total time (in minutes) that the pH was outside the limits set in Schedule A.

The permittee is required to continue using a strip-chart-recording pH meter for continuous pH recording or any other pH control system recorder that meets with City approval. A daily record shall be kept for each day of plant operation, excluding those days when there is no process activity. The records shall be maintained and must be available for direct review or photo duplication by City representatives, if required.

Upon approval by the Industrial Source Control Division, pH monitoring may be performed at the designated point of accommodation instead of the point of compliance specified monitoring. The point of accommodation shall be located after all wastestreams have been combined and pretreatment has been completed. Performing the pH monitoring at the point of accommodation does not relieve the permittee of the responsibility for maintaining compliance at the sampling manhole—the pH limits are applicable at both the point of accommodation and the point of compliance.

**Schedule E
GENERAL CONDITIONS**

1. Accidental Spill Prevention Plan

To comply with Section 17.34.090 of the City Code, the permittee shall submit a new or revised Accidental Spill Prevention Plan (ASPP) to the Industrial Wastewater Management Section 90 days after the effective date of this permit. The plans shall include the following elements.

- a. A description of the hazardous substances handled and their potential points of entry into the City sewer system or storm runoff
- b. A description of the measures to be taken to prevent entry at the described points before a spill occurs
- c. Measures to be taken to contain a spill if one occurs
- d. A description of employee training in the prevention and control of spills
- e. A posted notice informing employees of the requirement to notify the Bureau of Environmental Services in case of spills or uncontrolled discharges.

2. Appeal

Upon receipt of a final industrial wastewater discharge permit, a permittee may appeal any of its terms or conditions to the Code Hearings Officer in accordance with procedures set out at Chapter 22.10 of the Portland City Code; provided that such an appeal shall include a copy of the permit that is the subject of the appeal, shall state the basis for the appeal, and shall be filed with the Code Hearings Officer and the Bureau of Environmental Services.

3. Authorized Discharge

All discharge and activities authorized herein shall be consistent with the terms and conditions of this permit, Chapter 17.34 of the City Code and the Administrative rules. The discharge of any pollutant in excess of these limits shall constitute a violation of the terms and conditions of this permit.

4. Bypass or Diversion

The diversion or bypass (the intentional diversion of wastestreams from any portion of a permittee's treatment facility) of any discharge, from facilities used by the permittee, to maintain compliance with the terms and conditions of this permit is prohibited except:

- a. When unavoidable to prevent loss of life or severe property damage.
- b. When excessive storm drainage or runoff would damage facilities necessary for compliance with the terms and conditions of this permit.

4. Bypass or Diversion (continued)

The permittee shall immediately notify the City in writing of each such diversion or bypass, in accordance with the procedure specified in condition No. 23.

5. Certification

Legible copies of all applications, reports, and information submitted to the City shall be signed and certified as follows in accordance with 40 CFR 403.12.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

6. Chemical Storage

Chemicals shall be stored in a manner that will prevent the entry of these substances into the sanitary, combined sewer, or storm sewer system, or waters of the state.

7. Continuous Compliance

Compliance with Schedule E, No. 23 shall not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit.

8. Dilution Prohibition

It is unlawful for a discharger to use dilution as a partial or complete substitute for adequate treatment to achieve compliance with the standards and limitations set forth in this permit. The Director may impose mass limitations on dischargers who are using dilution to meet the applicable pretreatment standards or the requirement set forth in this permit.

9. Enforcement Provision

A violation of any conditions, standards or requirements of this permit constitutes a violation of Chapter 17.34 of the City Code and any rules promulgated thereunder. Therefore, the City may seek any or all of the remedies or penalties provided for in Section 17.34.110 of the City Code, including recovery of costs incurred by the City, in response to the following:

- a. Any violation by the permittee of the provisions in this Industrial Wastewater Discharge Permit.
- b. Any violation by the permittee of the provisions of the City Code.

9. Enforcement Provision (continued)

- c. Any violation by the permittee of an Enforcement Action requirement with respect to provisions set forth in this Industrial Wastewater Discharge Permit and the City Code and Administrative Rules.

The range or severity of enforcement actions taken by the City against the permittee will be determined by, but not limited to, the nature, magnitude, duration, and frequency of the violation as provided by City Code and Administrative Rules.

10. Extra-Strength Sewer Charge (ESSC)

Discharges exceeding 300 mg/L for the 5-day biochemical oxygen demand (BOD) or 350 mg/L total suspended solids (TSS) concentrations (as defined in Section 17.36.060(1) of the City Code) shall be subject to the extra-strength sewer charge (ESSC) established in Section 17.36.060(1).

11. Hazardous Waste Notification

The industrial user shall notify the Industrial Source Control Division Section, the POTW, the EPA Regional Waste Management Division Director, and State hazardous waste authorities in writing of any discharge into the POTW of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the industrial user discharges more than 100 kilograms of such waste per calendar month to the POTW, the notification shall also contain the following information to the extent such information is known and readily available to the industrial user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following 12 months.

12. Inspection and Entry

The permittee shall, at all reasonable times, allow authorized representatives of the City:

- a. To enter the permittee's premises where an effluent source or disposal system is located or where any records associated with this permit are kept.
- b. To have access to any required records and permission to copy these records. At no time can wastewater effluent data be claimed or held as confidential information.
- c. To inspect and evaluate any monitoring equipment or monitoring methods required by this permit.
- d. To sample any discharge to the sewer system.

13. Liability

The City of Portland, its officers, agents or employees shall not sustain any liability due to the issuance of this permit or the construction or maintenance of facilities resulting from this permit.

14. Monitoring

- a. The permittee shall record the following information:
 - * The exact date, time, and place of sampling
 - * Name of person who collected the sample(s)
 - * Type of sample(s) collected
 - * The dates analyses were performed
 - * Who performed the analyses
 - * The analytical techniques or methods used
 - * The results of all required analyses
 - * Whether quality assurance and quality control laboratory procedures are followed
- b. Samples and measurements, taken to meet the requirements of the above condition, shall be representative of the effluent. Grab sampling techniques must be used for samples collected for pH, cyanide, phenol, sulfide, volatile organic compounds and oil and grease monitoring.
- c. All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless otherwise approved in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants as specified in 40 CFR, Part 136. Laboratory quality assurance and quality control programs should be documented. EPA QA/QC programs should be followed.
- d. The permittee is required to document proper installation, and maintenance of flow monitoring and sampling equipment.
- e. If the results of the permittee's wastewater analysis indicate that a noncompliance has occurred, the permittee must notify the City's Industrial Source Control Division Section within 24 hours of becoming aware of the noncompliance. The permittee must also repeat the sampling within 24 hours of the effluent noncompliance or next process day and submit the analysis to the City within 30 days after becoming aware of the noncompliance.
- f. The permittee shall take all reasonable steps to minimize or correct any adverse impact to the POTW or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

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GENERAL CONDITIONS

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14. Monitoring (continued)

- g. If requested, the permittee shall provide or split discharge samples with the City of Portland Water Pollution Control Laboratory.

15. Permit Modification

This permit may be modified with 30 days prior written notification, in whole or in part, for causes including but not limited to the following:

- a. A change in the City's NPDES permit or any other condition that requires either a temporary or permanent elimination of any authorized discharge.
- b. To incorporate new or revised federal, state, or local pretreatment standards or requirements.
- c. Information indicating that the permitted discharge poses a threat to the City's collection and treatment system, POTW personnel, or the receiving waters and sludge.
- d. To correct typographical or other errors in the permit.
- e. Any significant change in the volume of a permitted discharge.

16. Permit Renewal

This permit is issued to a specific entity and cannot be transferred by the industrial user and must be renewed pursuant to Section 17.34.070 of the Code of the City of Portland and Permit Applications must be received 90 days prior to:

- a. Expiration date of current permit.
- b. In the event the permittee plans to cease operations at the present location, and plans to relocate within the City of Portland's jurisdiction and continue the same permitted activities.
- c. The permitted industrial process being significantly altered or changed so that pollutants not specifically mentioned in the current permit are present in the permittee's discharge.

17. Permit Suspension or Termination

- a. Violation of any terms or conditions of this permit or any applicable rule, standard, or order of the director of the Bureau of Environmental Services.
- b. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts.
- c. Falsifying self-monitoring reports.
- d. Tampering with monitoring equipment.

17. Permit Suspension or Termination (continued)

- e. Refusing to allow prompt access to the facility premises and records.
- f. Failure to meet effluent limitations.
- g. Failure to pay fines.
- h. Failure to meet compliance schedules.

18. Plant Closure

In the event the permittee plans to cease operations at the present business location, and not to relocate within the City of Portland's jurisdiction, the permittee shall inform this office, in writing, 60 days prior to plant closure.

19. Property Rights or Privileges

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges; it does not authorize any injury to private property or any invasion of personal rights; and it does not authorize any infringements or federal, state, or local laws or regulations.

20. Records Retention

All records of monitoring activities and results, including all original strip chart recordings for continuous monitoring instrumentation (and calibration and maintenance records), shall be retained by the permittee for a minimum of three years. This retention period shall be extended during the course of any unresolved litigation pertaining to the discharge of pollutants by the permittee, or whenever it is requested by the City, the Approval Authority (DEQ), the Regional Administrator (EPA).

21. Reporting Requirements

a. Accidental or Slug Loading

If accidental or slug loading to the sanitary sewer occurs, the permittee shall notify the City Permit Manager immediately. If no answer, then call the City Duty Officer at 503-823-7180, which is a 24-hour hotline available 7 days a week. A formal written report, discussing circumstances and remedies, shall be submitted to the City within 5 days of the occurrence.

b. Changes in Wastewater Characteristics

The permittee shall give notice to the Industrial Source Control Division Section 90 days before any facility expansion, production increase, or process modifications that result in new or substantially increased discharges or a change in the nature of the discharge.

21. Reporting Requirements (continued)

c. Change in representative

If the responsible corporate official changes, notify the City within 10 days, as per 40 CFR 403.12 (1) (4).

22. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to the other circumstances and the remainder of this permit shall not be affected.

23. Significant Non-Compliance

The City of Portland is required to annually publish in the Oregonian newspaper a list of Industrial Users that, at any time during the previous 12 months, were in significant non-compliance (SNC) with pretreatment requirements. SNC is determined if a violation meets one or more of the following criteria:

1. Violations of wastewater discharge limits:

- a. Chronic violations – when sixty-six percent (66%) or more of all of the measurements taken for the same pollutant exceed the respective discharge limit for that pollutant during a six month period.
- b. Technical Review Criteria violations – defined as those violations in which thirty-three percent (33%) or more of all of the measurements taken for the same pollutant during a six-month period equal or exceed the product of the numeric limit multiplied by the applicable TRC:
 - i) conventional pollutants (BOD, TSS, fats, oils & grease) TRC = 1.4
 - ii) all other pollutants, except pH TRC = 1.2
- c. Any other violation(s) of an effluent limit that the City reasonably believes has caused, alone or in combination with other discharges, Interference or Pass Through, including endangering the health of POTW personnel or the general public.
- d. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment, or has resulted in the City exercising its emergency authority to halt or prevent such a discharge.

2. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance.

3. Failure to provide required reports of any type within 30 days of the report due date.

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4. Failure to accurately report noncompliance.
23. Significant Non-Compliance (continued)

5. Any other violation or group of violations, which may include a violation of Best Management Practices, which the City determines will adversely affect the operation or implementation of the local Pretreatment Program.

24. Slug Load Notification

If the permittee is unable to comply with all the conditions of this permit due to a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause such as an act of nature, or should any condition cause the release of any slug load, the permittee shall:

- a. Immediately take action to stop, contain, clean up the unauthorized discharges, and correct the problem.
- b. Immediately call the City Permit Manager, if no response then call the City Duty Officer at 503-823-7180 (M-F 8:00am - 4:30pm) or 503-323-3398 (after 4:30pm and weekends).
- c. Within five (5) days submit a detailed written initial report to the City Permit Manager describing the breakdown, the actual quantity of resultant waste discharges, the corrective action taken, the steps taken to prevent recurrence, and any other pertinent information.
- d. Samples shall be taken immediately upon discovery of the Slug load. Within 15 days, a follow-up report shall be submitted. The report shall contain analysis of samples taken during such discharge and samples taken after normal conditions have been restored. The samples, at a minimum, shall be analyzed for the parameters required in Schedule B. Sampling shall be continued until all parameters are within discharge limits.

25. Upset

a. Definition:

For the purposes of this section, upset means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards, because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an Upset:

An upset will constitute an affirmative defense to an action brought for noncompliance with applicable pretreatment standards, if the requirements of paragraph c are met.

c. Conditions Necessary for a Demonstration of an Upset:

A permittee who wishes to establish the affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

25. Upset (continued)

- (1) An upset occurred and the permittee can identify the specific cause(s) of the upset.
- (2) The facility was, at the time, being operated prudently, efficiently, and in compliance with applicable operation and maintenance procedures.
- (3) The permittee has submitted the following information to the Industrial Source Control Division within 24 hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within 5 days).
 - * A description of the indirect discharge and cause of noncompliance
 - * The period of noncompliance, including exact dates and times or, if not corrected, the anticipated duration of noncompliance
 - * Steps planned or now being taken to reduce, eliminate, and prevent recurrence of the noncompliance

d. Burden of Proof

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset shall have the burden of proof.

e. Permittee Responsibility in Case of an Upset.

If reduction, loss, or failure of its treatment facility occurs, the permittee shall control production of all discharges in order to maintain compliance with applicable pretreatment standards until the facility is restored or an alternative method of treatment is provided. This requirement especially applies if the primary source of the treatment facility power is reduced, lost, or failed.

**Schedule F
GENERAL DISCHARGE PROHIBITIONS**

The permittee shall not discharge, cause to discharge or allow to discharge directly or indirectly into the City sewer system any of the following:

1. Wastewater containing substances in such concentrations that they inhibit or interfere with the operation or performance of the sewer system, or that are not amenable to treatment or reduction by the sewage treatment process employed, or are only partially amenable to treatment such that the sewage treatment plant effluent cannot meet the requirements of any agency having jurisdiction over its discharge to the receiving waters, or that prevent or impair the use or disposal of sewage treatment plant sludge and sludge products in accordance with applicable State and federal regulations;
2. Any liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction to cause fire or explosion or be injurious in any other way to the operation of the sewer system, or wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Celsius (using test methods prescribed at 40 CFR 261.21), or discharges which cause the atmosphere in any portion of the sewer system to reach a concentration of 10% or more of the Lower Explosive Limit (LEL).
3. Any solid or viscous substances capable of obstructing wastewater which will or may cause obstruction to the flow of wastewater or other interference with the operation of the sewer system;
4. Any noxious, malodorous or toxic liquids gases, vapors or fumes, solids, or other substances which, either singly or by interaction with other wastes, may cause acute or chronic worker health and safety problems, a public nuisance, a hazard or interference with any part of the sewer system;
5. Any industrial wastewater containing a hazardous or toxic substance which, either singly or by interaction with other substances, injures or interferes with the sewer system or constitutes a hazard to humans or animals, or creates a hazard in, or adversely affects the receiving waters, or results in such substances being discharged in combined sewer overflows or sewage treatment plant effluent in any concentrations in excess of limitations imposed by any permit, law or regulation;
6. Any wastes, wastewaters or substances having a pH less than 5.0 or more than 11.5, or capable of causing damage or hazard to structures, equipment, processes or personnel of the sewer system, unless these limits are modified by permit.
7. Any liquid or vapor having a temperature higher than 65 degrees Celsius (149 degrees Fahrenheit) or containing heat in amounts which will inhibit biological activity, or result in interference at the treatment plant. In no case shall a discharge to the sewer system contain heat in such quantities that the temperature of the treatment plant influent exceeds 27 degrees Celsius (80 degrees Fahrenheit);
8. Any material trucked or hauled from a cesspool, holding or septic tank or any other nondomestic source, except such material received at designated locations under City contract or permit in accordance with any other applicable requirements of the City Code 17.34 or rules adopted hereunder;
9. Any substance which may solidify or become discernibly viscous at temperatures above 0 degrees Celsius or 32 degrees Fahrenheit;

Schedule F
GENERAL DISCHARGE PROHIBITIONS

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10. Any material that has not been properly comminuted to 0.65 centimeters (1/4 inch) or less in any dimension;
11. Any slugload, as defined in City Code 17.34 or rules adopted hereunder;
12. Any substances with excessive color, as determined by the Director of Environmental Services, which are not removed in the treatment process;
13. Any batch discharges without written permission from the Director of Environmental Services. Batch discharges shall comply with all other requirements of City Code 17.34 and rules adopted hereunder;
14. Any concentrations of inert suspended or settleable solids which may interfere with the operation of the sewer system;
15. Any concentrations of dissolved solids which may interfere with the operation of the sewer system;
16. Any radioactive material, except in compliance with a current permit issued by the Oregon State Health Division or other state or federal agency having jurisdiction;
17. Any substance which may cause sewer system effluent or treatment residues, sludges, or scums, to be unsuitable for reclamation and reuse or which interferes with the reclamation process. (In no case, shall a substance discharged to the sewer system cause the City to be in noncompliance with sludge use or disposal criteria, guidelines or regulations developed under the Clean Water Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act (42 USC 6901), the Clean Air Act (42 USC 1857), the Toxic Substances Control Act (15 USC 2601), or any other federal or State statutes, regulations or standards applicable to the sludge management method being used, or any amendments thereto.)
18. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
19. Noncontact cooling water (except that noncontact cooling water may be discharged to the separate storm sewer system upon approval by the Director of Environmental Services);
20. Any substance that causes the City to violate the terms of its NPDES permit.

Appendix 1
DEFINITIONS

Abbreviations

BOD ₅	Five-day biochemical oxygen demand
mg/L	Milligrams per liter
k	Kilograms
m ³ /d	Cubic meters per day
ppm	Parts per million (assumed equal to milligrams per liter)
POTW	Publicly owned treatment works
WPCL	Water Pollution Control Laboratory

Averages for BOD, TSS, and chemical parameters are based on arithmetic mean of samples taken.

Definitions

Bypass

The intentional diversion of wastestreams from any portion of a permittee's treatment facility.

Compatible Pollutant

Biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, and additional pollutants that the City treatment works is designed to treat.

Conventional Pollutants

Classification of industrial pollutants, which includes BOD (biochemical oxygen demand), suspended solids, fecal coliform, pH (acidity/alkalinity), and other pollutants so designated by EPA, as defined by Section 304(a)(4) of the Clean Water Act.

Director of Environmental Services

The Director of Environmental Services of the City of Portland, Oregon, or that person's duly authorized representative or agent.

City, or City of Portland

The municipality of Portland, Oregon, a municipal corporation of the State of Oregon, acting through the City Council or any board, committee, body, official, or person to whom the Council shall have lawfully delegated the power to act on behalf of the City. Unless a particular board, committee, official, or person is specifically designated in these rules and regulations, wherever action by the City is explicitly required or implied herein, it shall be understood to mean action by the Director of Environmental Services of Portland, Oregon, or that person's duly authorized representative or agent.

Effective Date of this Permit

The date this permit is signed by the Director of the Bureau of Environmental Services.

Expiration Date

From 1 to 5 years beyond the effective date of this permit.

Hazardous or toxic substances

Hazardous or toxic substances are those substances referred to in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S. Code 9601 et seq.), section 502(13) of the Clean Water Act, and any other substances so designated by the Director of Environmental Services and contained in rules adopted pursuant to this Chapter.

Industrial Waste

Any liquid, solid, or gaseous substance (or combination thereof) resulting from any process of industry, manufacturing, commercial food processing, business, agriculture, trade, or research, including but not limited to the development, recovery, or processing of natural resources and leachate from landfills or other disposal sites.

Industrial Wastewater Discharge Permit

A permit to discharge industrial wastewater into the City sewer system issued under the authority of the City Code, which prescribes certain discharge requirements and limitation.

Interference

Interference means a discharge which, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the normal operation of the City sewer system, or which causes a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or any increase in the cost of treatment of sewage or in the cost of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations); Section 405 of the Clean Water Act, the Solid Waste Disposal Act (including Title II, more commonly referred to as the Resource Conservation and Recovery Act), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of RCRA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum Daily Discharge Limitation

The highest allowable daily discharge.

Nonconventional Pollutants

All pollutants that are not specifically designated as either conventional or toxic.

Oil and Grease

Fats, Oils and Grease. Fats, oils and grease are those substances which are measured by USEPA Method 1664: N-Hexane Extractable Method (HEM) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM).

- (a) Non-polar fats, oils and grease are that portion of fats, oils and grease which is measured as non-polar (from petroleum sources) by USEPA Method 1664.
- (b) Polar fats, oils and grease are that portion of fats, oils and grease which is determined to be polar (of animal or vegetable origin) by USEPA Method 1664.

Pass Through

Pass through means a discharge which exits the POTW into waters of the United States in Quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

POTW

POTW means Publicly Owned Treatment Works, which includes any devices and systems, owned by a State or municipality, used in the collection, transportation, storage, treatment, recycling and reclamation of wastewater.

Pretreatment

The reduction of the amount of pollutants, the elimination of pollutants, or the alternation of the nature of pollutant properties in wastewater to a non-harmful state, prior to or in lieu of discharge of such pollutants into the City sewer system.

Sampling

- a. The "monthly average" other than pH is the arithmetic mean of samples collected during a calendar month.
- b. The "daily maximum" is defined as the greatest allowable value for any calendar day.
- c. The "four day average" is defined as the average of four discrete sampling events for a particular pollutant, which is determined by the sampling frequency and not necessarily four consecutive calendar days.
- d. A "composite sample" is a series of individual discrete samples taken at selected intervals based on either an increment of flow or time. The samples are mixed together to approximate the average composition of discharge to the City sewer system. A composite sample for one day shall consist of a pool of samples, collected over the operational period of the production day.

- e. A "Grab" sample is an individual sample collected in less than 15 minutes, without regard for flow or time.
- f. A "Grab-Composite" is a minimum of four grab samples collected and preserved over a 24-hour period and combined to provide a representative sample of effluent being discharged.

Schedule of Compliance

A schedule of remedial measures, including an enforceable sequence of actions or operations leading to compliance with an effluent limitation or other limitation, prohibition, or standard.

Severe Property Damage

Substantial physical damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Slugload

A slugload is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge.

Solid Waste

Any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits.

Solid Waste Disposal

The final placement of refuse that cannot be salvaged or recycled.

Solvent Management Plan

A plan that specifies the toxic organic compounds used, the method of disposal used (instead of dumping into wastestreams), and procedures for ensuring that toxic organics do not spill or leak into wastewater discharged to the City sewer system.

Total Dissolved Solids

The total dissolved (filterable) solids as determined by use of the method specified in the list of approved test procedures.

Total Organic Active Ingredients

The sum of all organic active ingredients covered by the organic pesticide chemicals manufacturing subcategory, which are manufactured at a facility subject to the effluent guidelines for pesticides chemicals manufacturing.

Total Solids

The sum of dissolved and undissolved constituents in water or wastewater, usually expressed as milligrams per liter.

Total Suspended Solids

Total suspended matter that either floats on the surface or is in suspension in water or wastewater and that are removable by laboratory filtering (as described in *Standard Methods for the Examination of Water and Wastewaters*, current edition) or Guidelines Establishing Test Procedures for the analysis of Pollutants, contained in 40 CFR 136, as published in the *Federal Register*. (Bureau of Environmental Services Administrative Rules I[22])

Upset

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards, because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waste

Unwanted materials left over from manufacturing processes, or refuse from places of human or animal habitation.

Wastewater

Industrial waste, sewage, or any other waste, including that which may be combined with any groundwater, surface water, or stormwater that may be discharged to the city sewer system.

Water Pollution

The addition of enough harmful or objectionable material to damage water quality.

Appendix 2
SAMPLING LOCATION MAP

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Appendix 2
SAMPLING LOCATION MAP

Appendix 3
ACCIDENTAL SPILL PREVENTION PLAN

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Appendix 3
RESERVED: ACCIDENTAL SPILL PREVENTION PLAN

To be updated and submitted to Bureau of Environmental Services within 90 days.

Appendix 4
POLLUTANT PROHIBITIONS

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Appendix 4
Individual Organic Compounds - Pollutant Prohibitions

POLLUTANT PROHIBITIONS

METHOD DETECTION LIMIT (mg/L)

Volatiles

Bromodichloromethane	0.005
Bromoform	0.005
Bromomethane	0.010
1,1,1,2-Tetrachloroethane	0.010
1,1,2-Trichloroethane	0.005
1,1-Dichloroethene	0.005
Chloroethane	0.050
Chloromethane	0.005
Dibromochloromethane	0.005
Vinyl Chloride	0.050

Base/Neutral extractables

1,2,4-Trichlorobenzene	0.005
1,2-Dichlorobenzene	0.005
1,2-Diphenylhydrazine	0.005
1,3-Dichlorobenzene	0.005
1,4-Dichlorobenzene	0.005
2,6-Dinitrotoluene	0.005
4-Bromophenyl-Phenyl Ether	0.005
Bis (2-Chloroethoxy)methane	0.010
Bis (2-Chloroisopropyl)ether	0.010
Hexachlorobenzene	0.005
Hexachlorobutadiene	0.005
Hexachlorocyclopentadiene	0.005
N-Nitroso-Di-N-Propylamine	0.005

Pesticides

4,4-DDD (p,p-TDE)	0.001
4,4-DDE (p,p-DEX)	0.001
4,4-DDT	0.001
a-BHC (alpha)	0.001
b-BHC (beta)	0.001
d-BHC (delta)	0.001
Dieldrin	0.001
Endosulfan II (beta)	0.001

Appendix 4
POLLUTANT PROHIBITIONS

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Endosulfan Sulfate	0.001
Endosulfan-I (alpha)	0.001
Endrin	0.001
Endrin Aldehyde	0.001
g-BHC (gamma) (Lindane)	0.001
Heptachlor	0.001
Heptachlor Epoxide	0.001
Toxaphene	0.001

Polychlorinated biphenyls (PCBs)

PCB 1016	0.001
PCB 1221	0.001
PCB 1232	0.001
PCB 1242	0.001
PCB 1248	0.001
PCB 1254	0.001
PCB 1260	0.001

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Permit Amendments

VOID

Waste & Storm Water Management Plan

**Kinder Morgan Bulk Terminals, Inc.
Terminal 4
11040 N. Lombard
Portland, OR 97203**

March 2010

Updated: 09-17-2010

Kinder Morgan Portland Bulk Terminal Water Management Systems

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Kinder Morgan Portland Bulk Terminal 4 Water Management Systems

General System Descriptions

There are two components to the water management efforts at KMBT-4: storm water, which is surface rain water routed directly into the Willamette River and wastewater, which is similar but treated for contaminants and pH on-site before being put into the City of Portland sewer system. Each element has its own environmental standards and permit issues that KM must satisfy for various federal, state and city regulatory agencies. For storm water the issues often center around suspended solids levels while for waste water the most pressing issues usually involve total dissolved solids.

Surface water runoff is either routed to various catch basins on the facility which release directly into the Willamette River or it is captured at closed-off catch basins and then pumped through 1 ½" hoses into the KM waste water treatment system. As such, storm water is managed either to minimize exposure to industrial pollutants while on the KM facility or it is treated to reduce the presence and impact of industrial pollutants acquired on-site before release into the city sewer system.

Storm Water System

The storm water system consists of 13 catch basins located throughout the terminal connected to a single river outfall release point just northwest of the supercargo shack. There is another storm water outfall located near the Dravo, however as its catch basins collect water from outside the boundaries of this facility it is not our concern from a permitting perspective.

Of T-4's catch basins, the one west of the center tower is routinely kept closed so the water captured there can be pumped into the waste water treatment system. Others, such as the one by the west end of the storage building are closed as needed when nearby operations might otherwise allow contaminated water to enter the river. Whenever there are operations which could negatively impact the water quality of our storm water steps should be taken to capture the affected water and send it through our waste water treatment system.

Waste Water System

The waste water treatment system consists of fixed and temporary pumps placed at various T-4 collection points. The pumps move large volumes of industrially exposed water first to a series of passive, gravity feed settling/storage sites and

then through various active water treatment regimens prior to the water's release into the city sewer system. Fixed pump sites include two in the tunnel beneath the storage building, another underneath RCV-1 head roll, one also under the center tower and one under the tail area of CV-2. Also, there is an additional pump by the Marine Tower which pumps dock surface water into the settling pond. A permanent sump pump has also been installed outside the west end of the storage building to move surface water to the RCV-1 containment area. Additional pumps are placed as needed for routine maintenance cleaning.

The two storage building sump pumps move water from the basement to the RCV-1 containment area. From here the water is pumped to a second 2000 gallon containment area beneath the center tower and then to a pair of settling tanks in series. The first in line is a 20,000 gallon Frac Tank followed by a 17,624 gallon steel cylinder tank. These two tanks, located immediately south of the warehouse, are interconnected by valves so as to fill independently or as one, if desired. Waste wash water moves from these to a 43,090 gallon open air settling pond southeast of the warehouse which also captures surface water run off from the vicinity of the dock. Water is pumped from this settling pond to a final 9,400 gallon storage tank inside the warehouse. Here begins the active water treatment as the water passes first through a 250 micron filter to remove suspended solids and particulates and through oil/water separator filter media to remove hydraulic and petroleum residues and lastly, into a mixing tank with a sulfuric acid injection system that lowers the pH of the alkaline soda ash water to an acceptable permit range for release into the city sewer system.

Waste Water Treatment

Total Dissolved Solids (TDS) and pH are the primary issues concerning KMPBT-4 waste water treatment. Our waste water permit requires release pH to be within a range of 5.0-11.5. Additionally, 3500 pounds is the TDS limit that can be put into the city sewer system in a 24 hour period. TDS is calculated by monitoring the waste water for its electrical conductivity which varies depending on how much soda ash is dissolved in the water. Though the TDS varies substantially depending on temperature, water volume, rainwater/wastewater ratio, etc., it is fair to say the somewhat average amount of dissolved solids handled here result in around 7,000-18,000 gallons of wastewater being treated and returned to the city storm water system in a 24 hour period.

A Eurotherm Chessel TDS Controller is the foundation of the T-4 waste water treatment system. The controller constantly monitors all aspects of waste water treatment; flow, volume, release rate, inlet & outlet pH, TDS concentrations & release rate and more in real time and automatically stores the history to a hard drive contained within. The controller is calibrated to shut the waste water treatment system down well before the permitted release limit is reached. It closes down when the total daily TDS approaches 2900# in a 24 hour period spanning noon to noon. Also, the controller regulates redundant inlet control valves to neck down the gravity feed inlet rates as needed to provide

approximately 24 hours of water release when sufficient waste water volume is present.

Alarms

The KMPBT-4 waste water treatment system also includes a variety of visual and audible alarms. There is a red flashing light showing when the shop red tank is full as realized by float switch within the tank. Additionally, there both high and low pH set points tied to audible and flashing blue light alarms which will shut the treatment system down before the permit level pH levels are reached. The system remains shut down until the alarms are acknowledged on the control panel. There is also a flashing yellow light to indicate when the valve from the outside red tank to the pond is closed. This valve is controlled by a float switch located in the pond so to prevent the pond from being overfilled.

Water backs up—a simple concept to keep in mind in understanding the alarm system employed at T-4. That is to say when the last water storage tank in the system—the one in the shop—fills up an alarm light turns on in the shop but the system continues to store water—backing up—ultimately until the storage tanks have reached capacity. When there is a full shop tank condition the pump located at the pond ceases operation but the pond will continue to take on water until high water activates a float switch that cuts off the supply of water to the pond from the cylinder/Frac Tank combo. However, these tanks will continue to fill, until a high water switch in the cylinder tank shuts off the pumps from the center tower and the head of RCV-1. At this point a second red alarm light goes off in the warehouse signifying the water storage system is full.

Best Management Practices

Best Management Practices (BMPs) are guidelines that are developed to assist facility operators to eliminate or minimize, to the extent possible, any unanticipated environmental impacts that may occur from the loading of dry bulk product into vessels. BMPs are written into environmental, health, and safety procedures for the conscientious operation of Terminal 4.

CARGO SPILLAGE:

1. Cargo is delivered to the terminal rail yard by Union Pacific Railroad, after railcars containing cargo are staged the railcars shall be inspected for cargo leakage.
2. If a railcar is seen to be leaking cargo then contact maintenance personnel to stop leakage.
3. Complete the KMBT-4 designated Hopper Car Defect Report and fax to all departments noted on fax machine notification list next to fax machine.
4. Notify terminal clean up personnel of cargo spillage to be cleaned.

5. Cargo spillage on to ship, land and dock from conveyor and cargo handling systems shall be shoveled, swept or vacuumed as operations and safety allows.
6. Place spilled cargo in designated drop boxes for approved disposal.
7. Follow the Kinder Morgan Bulk Terminal #4 written "Terminal Spill Procedures" policy.
8. Complete the Kinder Morgan Bulk Terminal #4 "Safety / Environmental / Cargo Cleanliness Worksheet" every work shift of cargo operations.
9. Complete the Kinder Morgan Bulk Terminal #4 "Superintendent Daily Spill & Clean Up Checklist" which must be completed minimum of twice per day when cargo loading operations occur.
10. Adhere to the Ship Deck Cleanliness Procedure including sign off of the Report of Deck Cleanliness document by on site KM management personnel upon every vessel completion. Signed document is to be kept in the ship's file.

General impacts on storm water discharges:

1. Containment or covering of areas or operations that may contain products that are to be kept out of storm water.
2. Good housekeeping and spill response to clean up any debris or substance, such as oil or grease, when it may interact with storm water.
3. Proper disposal of solid wastes and ensuring waste containers outside wastewater containment areas are covered to prevent interaction with storm water.
4. Follow the requirements of the Kinder Morgan Bulk Terminal #4 Storm Water Pollution Control Plan.
5. Complete the Superintendent Daily Terminal Spill & Clean Up Checklist every cargo operation shift.
6. Complete the Kinder Morgan Bulk Terminal #4 "Daily Inspection Report Locomotive #1295" and "Mobil Equipment Pre-Operational Daily Inspection" reports when operations are conducted.
7. Insuring all storm drains are closed prior to undertaking maintenance and service activities which could result in inappropriate materials entering the storm water system.

Washing Waste Water impacts include:

1. Preventive maintenance on wastewater system and related equipment.

2. Good housekeeping and spill response to clean up any debris or substance, such as oil or grease, before it may enter the sewer or wastewater collection system.
3. Diversion and containment of equipment wash water from storm drain pipes to minimize impact to storm water discharge.
4. Follow the requirements of the Kinder Morgan Bulk Terminal #4 Accidental Spill Control Plan.
5. Employ dry cleaning methods where appropriate to reduce waste water treatment needs.

Locomotive Maintenance:

Two levels of locomotive maintenance activities will occur at Kinder Morgan Portland Bulk Terminal 4. Semi-weekly maintenance will occur at the West tail track just before the road crossing entrance to the T-4 facility on either the north or south track routinely used to bring railcars into the dump building. (See Appendix A, Site A) At these sites only inspection and less demanding maintenance or R&R (remove and replace) activities of the sort described in Appendix B will be conducted. Best Management Practices for these activities include the use of secondary containment vessels to hold any buckets, etc. being used for draining liquids and additional impermeable membranes, ground covers and absorbents being used when appropriate to provide additional work vicinity ground protection.

Two secondary locomotive maintenance work areas are also now defined for use at Terminal 4. The first is just north of the entrance to the Kinder Morgan Terminal 4 maintenance shop on the south track exiting the railcar dump building. The second is further along on this same rail track just east of the asphalt so as to provide the ability to work underneath the locomotive should that be necessary. Work likely to be performed at either of these sites could be more extensive in nature. However, the routine precautions to be taken in these two areas are more extensive. Here the impermeable barrier will also be bermed to contain any liquid materials generated. Upon completion any liquids will be gathered and disposed of properly according to Kinder Morgan and appropriate industrial waste handling protocols.

In the event repairs are called for that include welding, cutting or grinding, such repairs will be done over Site B when possible. Should the locomotive be unable to move until these activities are completed, appropriate groundcovers and or hot work blankets will be used to prevent metallic residue from entering the ballast rock.

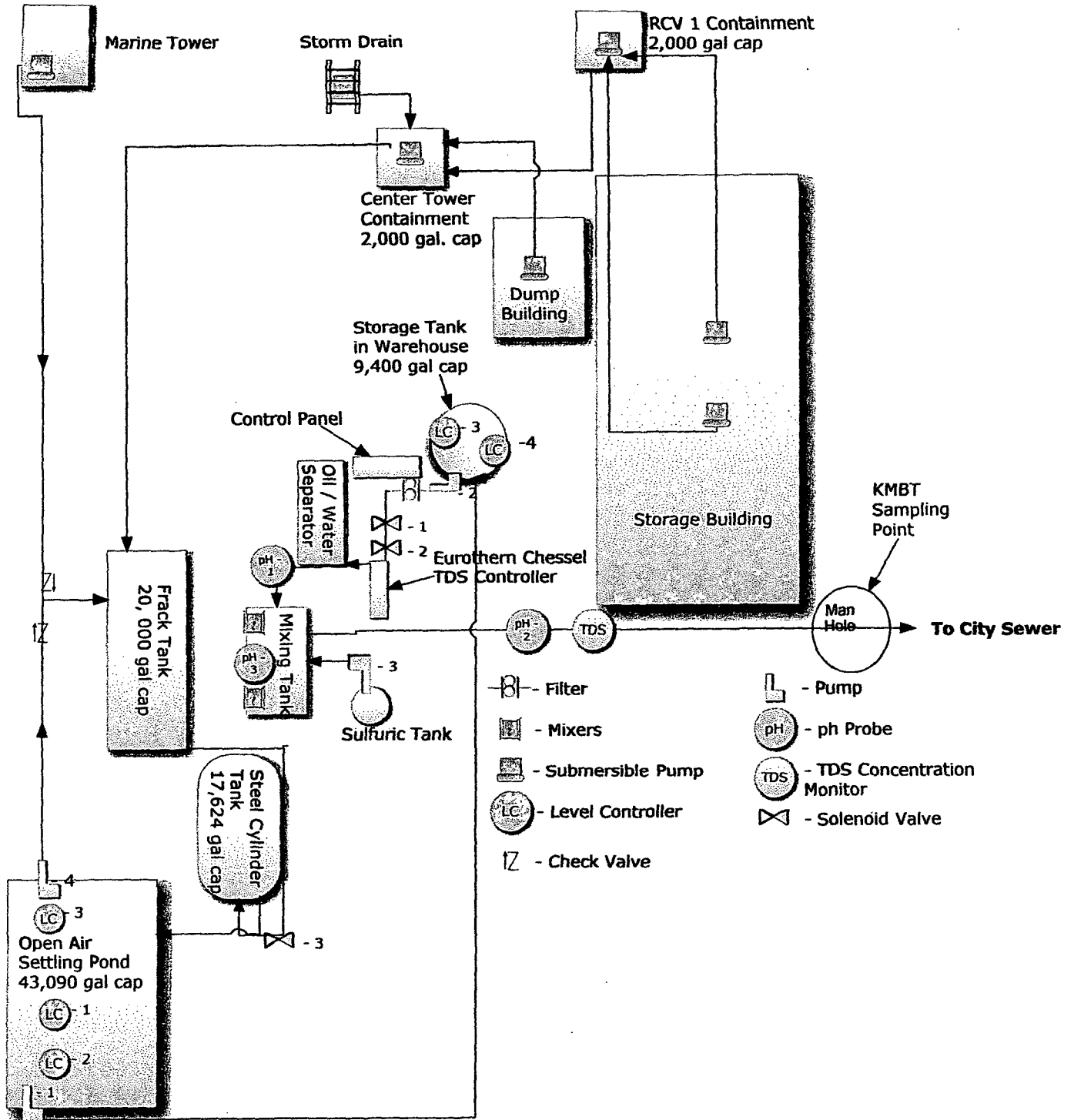
Storm/Waste Water Treatment Systems Maintenance:

There is limited ILWU regular maintenance involved in the storm/waste water treatment systems. The oil/water system filter media is washed or changed as needed. The sulfuric acid system, pH system monitor and the dissolved solids monitoring equipment are all routinely calibrated and otherwise maintained by

Measuretech, an outside contractor, on a bi-weekly basis. Measuretech also changes out the particulate screens on an as needed basis.

Sump pumps within the system are checked often to assure the impellers aren't clogged or a breaker tripped. Routinely the pumps may need rebuilding or replacing. Sections of the 1 ½" hose used to route the water may need to be replaced. Periodically the outdoor pond is drawn down by West Coast Cleaning, wood chips are added to the silt and the waste is then removed.









Attachment A Waste Water Treatment Schematic





Note: The schematic above is not proportional, nor does it show all the piping and valves for the waste water treatment, but does show the components, approximate locations, and general water flow directions. See Attachment C for a more accurate location and building layout.

Attachment B

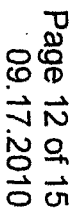
Waste Water Treatment Schematic Legend

- pH – 1 Inlet probe measuring pH prior to mixing tank.
- pH – 2 Outlet probe measuring pH of water released to city.
- pH – 3 Mixing Tank probe; values here determine sulfuric injection amount pumped into mixing tank.
- LC – 1 Level Control Switch in Settling Pond which opens and closes Solenoid Valve (3) from Frac Tank and Steel Cylinder Tank. Once the Settling Pond volume is above the float level, no more water will be allowed to flow in from the holding tanks into the pond until the volume falls below float. It will then reopen the solenoid valve.
- LC – 2 Level Control Switch in Settling Pond that activates Pump -1 when volume reaches above the float level.
- LC – 3 Level Control Switch located in the Warehouse Storage Tank. Once the tank is full the float will activate the switch that will not allow any more water to be pumped from the Settling Pond. Once the water falls below the float level Pump 1 will be able to pump from the Settling Pond, if needed.
- LC – 4 Lower Level Control Switch located in the Warehouse Storage Tank that triggers Pump 2 when a minimum volume of water is in tank.
-  -1 Pump located at Settling Pond that pumps water to the Storage Tank in Warehouse.
-  -2 Pump located on the outlet of the Storage Tank in Warehouse that pumps water through the filter and Solenoid Valves 1 & 2. It is controlled by the Eurotherm Chessel TDS Controller, which will monitor the waste water and only allow 2,900 pounds of TDS into the system.
-  -3 Pump located between the Sulfuric Acid Tank and the Mixing Tank. It pumps the needed sulfuric to lower the pH as needed.
-  -4 Pump located at the Settling Pond that pumps to the Frac & Cylinder Tanks when the Settling Pond reaches a high level.
-  -5 Pump located at Surge Tank to move water into water treatment system.
-  -6 Pump located at Settling Pond to move water back to Frac Tank on high volume emergency basis to prevent pond from overflowing.
-  -7 Pump located outside west end of Storage Building to collect surface water accumulation and move to RCV-2 Containment Pond.
-  -1 Solenoid Valve that restricts the flow from the Storage Tank in the Warehouse into the Mixing Tank. It is controlled by the Eurotherm Chessel TDS Controller, which will monitor the waste water and only allow 2,900 pounds of TDS into the system.

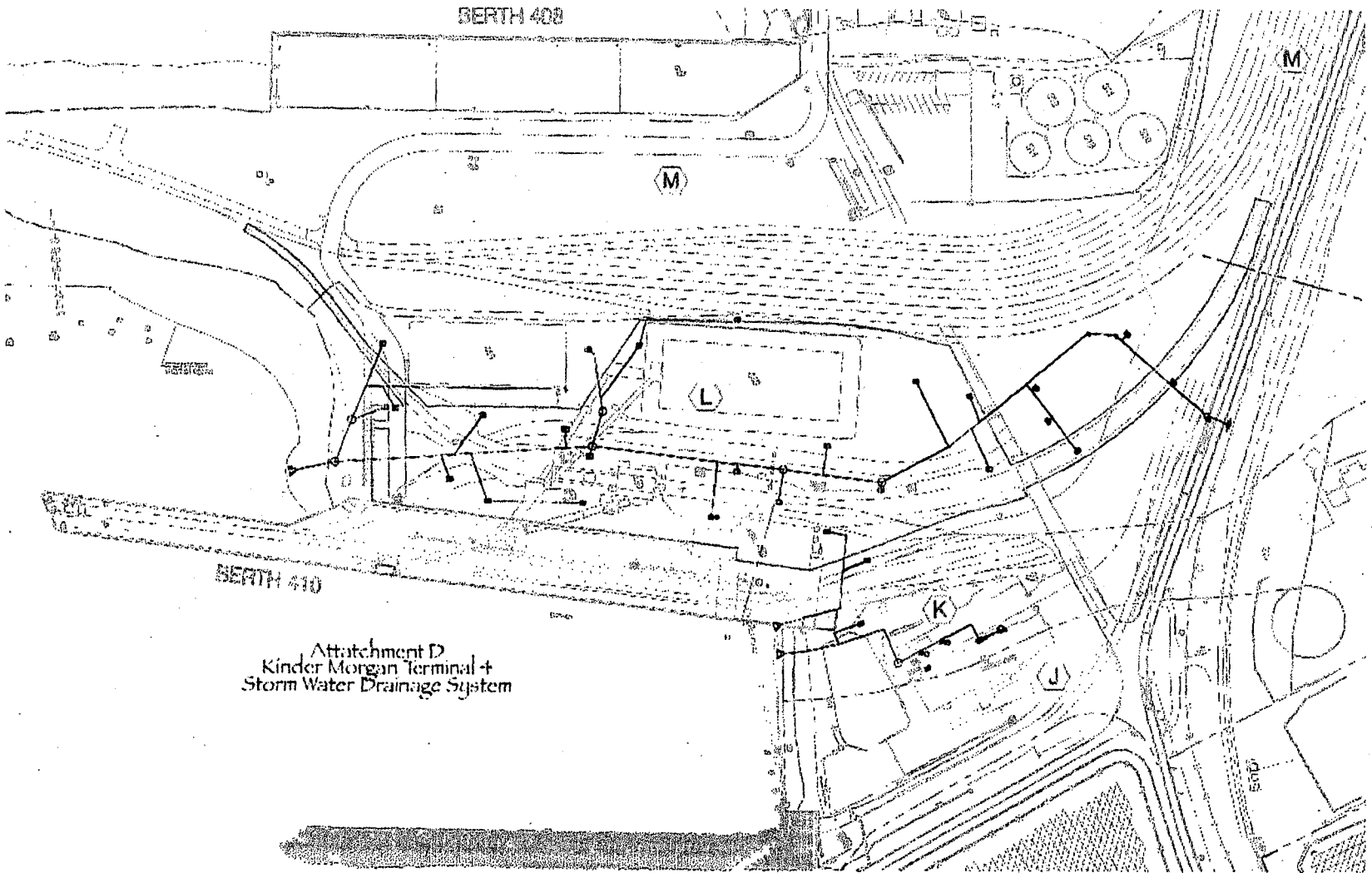
Attachment B (cont.)

-  -2 Redundant Solenoid Valve that is in-line and performs the same function as Solenoid Valve – 1, to insure that the 2,900 pound allowance of TDS is not exceeded.
-  - 3 Solenoid Valve that is controlled by LC – 1 that will stop or allow the water flow from the Frac Tank and the Steel Cylinder Tank depending on the level of water in the Settling Pond.

KMB00000400



Attachment D **Kinder Morgan Terminal 4 Storm Water Drainage System**



Attachment D
 Kinder Morgan Terminal +
 Storm Water Drainage System

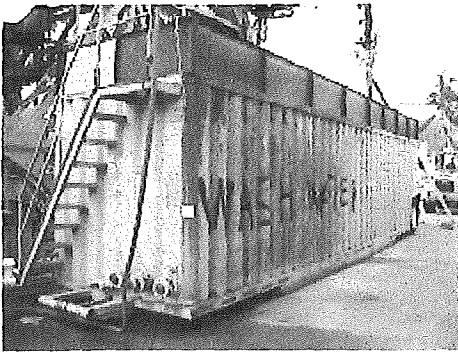
LEGEND
 --- BASIN BOUNDARY
 — LEASE BOUNDARY

DRAINAGE PLAN
 SCALE 1" = 100'



Attachment E

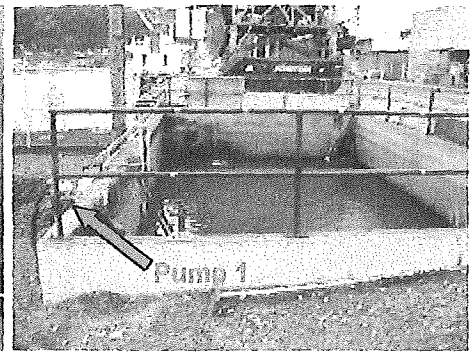
Water Management Component Photos



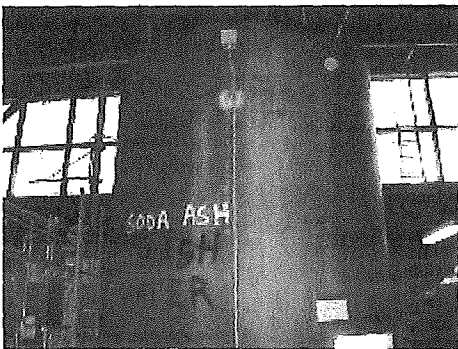
Frack Tank



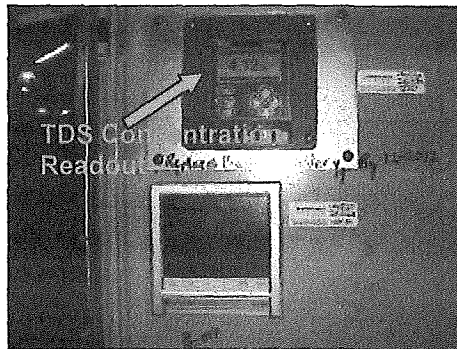
Steel Cylinder Tank



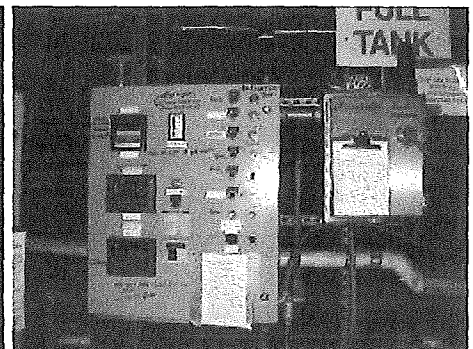
Open Air Settling Pond



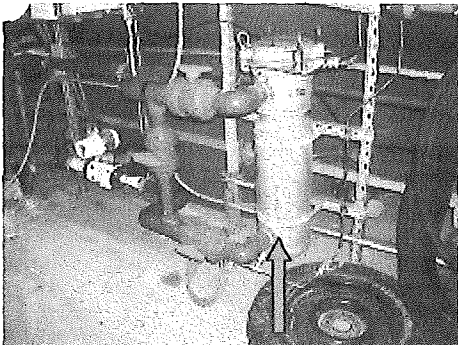
Storage Tank in Warehouse



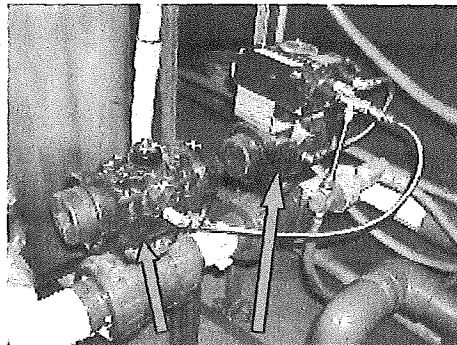
Eurotherm Chessel TDS Controller



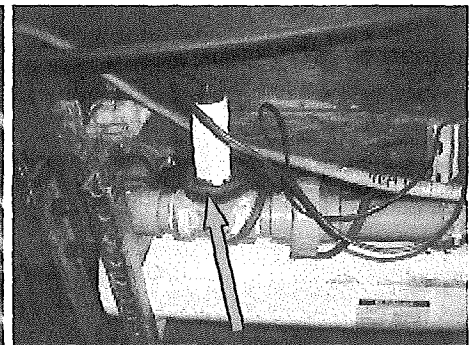
Control Panel



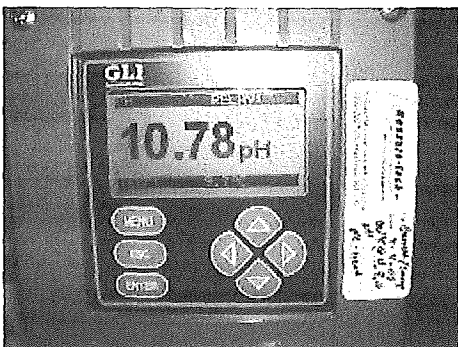
250 Micron Filter



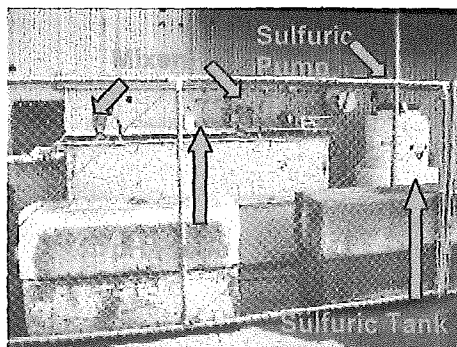
Solenoid Valves 1 & 2



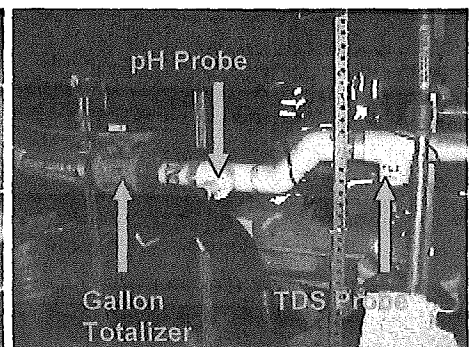
pH Probe 1



pH Probe 1 Readout

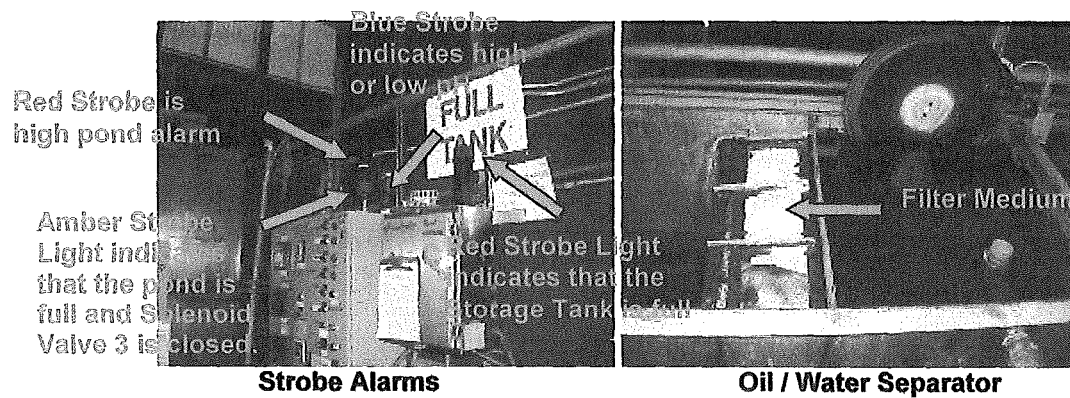


Mixing Tank and Sulfuric Acid Tank



Outlet pH, TDS Probe and Totalizer

Attachment E (cont.)





Kinder Morgan Bulk Terminals, Inc.

Terminal 4, Pier 4
11040 N. Lombard
Portland, Oregon 97203
P.O. Box 83838
Portland, Oregon 97283

February 12, 2011

Department of Environmental Quality
N.W. Region
2020 S.W. 4th Ave. Suite 400
Portland, OR 97201-4987

Reference: Standard Air Contaminant Discharge Permit No. 26-2909
Kinder Morgan Bulk Terminals, Inc.
Portland Bulk Terminal #4, 2009 Annual Report

Permit Coordinator,

Please find two copies of the following information as required by Section 6.2, Annual Report, of the Kinder Morgan Bulk Terminals, Inc. Standard Air Contaminant Discharge Permit # 26-2909.

a.) i.) Monthly tonnage for 2010 soda ash cargo exported:

Month	Short Tons	Month	Short Tons
January	413,743	July	411,091
February	487,199	August	358,704
March	340,531	September	368,071
April	426,379	October	380,997
May	332,910	November	445,274
June	279,527	December	407,782

a.) ii.) Monthly 2010 PM₁₀ Emissions; S.T. = Short Tons.

Month	PM10	Month	PM10
January	0.062 S.T	July	0.061 S.T.
February	0.073 S.T.	August	0.054 S.T.
March	0.051 S.T.	September	0.056 S.T.
April	0.064 S.T.	October	0.057 S.T.
May	0.051 S.T.	November	0.066 S.T.
June	0.044 S.T	December	0.061 S.T.

- b.) No excess emission events occurred at Kinder Morgan Portland Bulk Terminal #4 during the year 2010.
- c.) There were no air quality complaints received by Kinder Morgan Portland Bulk Terminal #4 during the year 2010.
- d.) There were no permanent changes made in pollution control equipment in 2010.
- e.) Air pollution control equipment 2010 maintenance:

Equipment I.D.	Maintenance Description	Quantity
DC-1: Baghouse having (308) 12'X 10" filter bags	Replaced all filter media 10/14/2010	1
	Washed transfer pipe system	4
	Steam cleaned intake ducts	3
	Socks replaced due to damage	2
DC-2: Bin vent having (36) 6'X10" filter bags	Dry cleaned entire system	3
	Replaced all filter media 10/19/2010	1
DC-3: Cannister above choke feeder having (5) 36"X12" bags	Cleaned entire system	3
	Replaced all filter media 8/10/2010	1
DC-4: Baghouse having (40) 10'X 10" filter bags	Cleaned entire system	3
	Replaced all filter media 10/20/2010	1
DC-5: Baghouse having (156) 10'X 10" filter bags	Dry Cleaned entire system	9
	Replaced all filter media 7/23/2010	1
DC-6: Bin vent having (12) 40"X10" filter bags	Cleaned all vacuum ducts	4
	Replaced all filters 9/23/2010	1
Bin Vents: Assorted sizes; having (12)-(56) 10'X10" filter bags	Cleaned all bin vents	5
	Replaced all filter media BV-2, 4,5,6,6A,8	6
	Replaced blower SCV-2 Tail	1
Ship Loader Upper Boom Gimbal	Steam cleaned	7
	Adjusted filter media	7
Ship Loader Lower Boom Gimbal	Steam cleaned	7
	Adjusted filter media	7
Ship Loader Choke Feeder	Replaced proximity switches	1
	Steam cleaned & cleared dust hoses	7

Throughout the year all air handling system maintenance activities were scheduled during periods when cargo was not being handled. At no time during 2010 did Kinder Morgan Portland Bulk Terminal 4 operate with required dust systems off line or in a bypass mode.

Additionally, dry cleaning is the preferred regular maintenance procedure by which the inherent buildup of dust material inside ductwork, bag houses, hoppers etc. is loosened by hand and falls, always contained, into binsters, waste drop boxes and other capture vessels. The material is ultimately taken to Hillsboro Landfill for disposal.

Some dust control components may be steam cleaned in place or adjacent to the maintenance shop with all wastewater generated passing through the Kinder Morgan water treatment system. Filter element replacement consists of removing all individual socks in a Dust Control Baghouse or Bin Vent and replacing them with clean filter socks. The soiled socks are carefully stacked onto wooden pallets which are immediately picked up by Blue Sky Filters for washing and refurbishment or replacement as needed.

In late 2010, Kinder Morgan Management discovered anomalies in some air to cloth ratios stated in the Process and Control Devices Table of the current KMPBT-4 Air Permit. Upon this realization, Serbaco Inc., an air/dust control engineering firm was contracted to examine all dust control operational parameters in place at KMPBT-4. This third party review of our dust control systems confirmed some of the initial findings and also brought new realizations to light:

Dust Control Device	Stated Air to Cloth Ratio	Actual Air to Cloth Ratio
DC-1 Bag House	11:1	6:1
DC-2 Bag House	6:1	7:1
BV-4 Bin Vent	6:1	32:1
BV-6 Bin Vent	6:1	10:1
* DC-4 Bag House		8:1
* DC-6 Bag House		6:1
* BV-5 Bin Vent (mistakenly identified as BV-3)		32:1

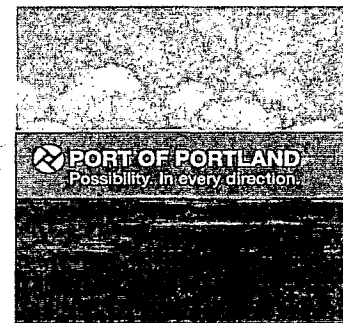
*These Dust Control Devices are discussed in the current Air Permit but not described in the Process and Control Devices Table.

These findings were discussed in a meeting between Oregon Department of Environmental Quality, Kinder Morgan and Serbaco personnel held at DEQ NW Region Office January 5, 2011. Since there had been a very recent on-site visit by DEQ during vessel loading operations and in which no visible emission problems were noted, consensus was reached that the air-to-cloth discoveries did not suggest dust control shortcomings but rather procedural discrepancies. It was agreed the findings would be described in this Annual Report and more formally addressed within the next Air Permit Application slated to be submitted in 2012.

If there are any questions regarding this report please contact me at (503) 285-2990, ext. 11.

Sincerely,

Bruce Craven
Terminal Manager,
Portland Bulk Terminal #4
Kinder Morgan Bulk Terminals, Inc.
cc: Brent McMullin



January 8, 2010

CERTIFIED MAIL

Kinder Morgan Bulk Terminals, Inc.
P.O. Box 625
7116 Highway 22
Sorrento, LA 70778

**Subject: Transmittal of Final Report – Baseline Audit
Kinder Morgan Bulk Terminals, Inc. Leasehold
11040 N Lombard Street; Marine Terminal 4, Pier 4
Portland, Oregon**

Dear Sir:

Enclosed is one (1) copy of the baseline environmental audit report prepared by URS for the Terminal 4 Kinder Morgan facility. The environmental baseline audit was conducted in accordance with the Lease #1987-109 between the Port of Portland ("Port") and Kinder Morgan Bulk Terminals, Inc. ("Lessee"), including Amendments No. 1 through Amendment No. 7.

Pursuant to Section 10.3.1 of Amendment No. 7, the enclosed baseline environmental audit shall be considered the Environmental Baseline to assist in the allocation of future environmental liability between Lessee and the Port under the Lease.

As provided in Section 10.3.2 of Amendment No. 7, if the Port has a good faith reason to suspect that there is or has been a Hazardous Substance Release by Lessee or its Associates or significant material non-compliance with Environmental law attributable to the acts or omissions of Lessee or its Associates, the Port may, after a written communication of those reasons to Lessee, conduct an Environmental Audit of the Premises (a "Special Audit"). If the Special Audit confirms such a Hazardous Substance Release or an

November 21, 2006

Page 2

imminent threat of such a Hazardous Substance Release or finds a significant material non-compliance with Environmental Law by Lessee or its Associates posing a threat of Hazardous Substance Release (collectively a "Material Violation"), then Lessee will be required to reimburse the Port for the Special Audit. If no Material Violation is found, the Port will pay for the Special Audit. In addition, upon the Port's prior request, from time to time, the Port may perform a periodic Environmental Audit of the Premises at its own cost ("Periodic Audit"). Copies of all Special or Periodic Audits will be provided to the Lessee at Lessee's request.

Please feel free to call me if you have any questions. We will follow up with you to discuss any necessary action items as reflected in the enclosed report.

Sincerely

Port of Portland



David J. Breen

Environmental Project Manager

Phone: 503-240-2011

Fax: 503-548-5916

Email: David.Breen@portofportland.com

Attachment:

Final Report – Baseline Audit, Kinder Morgan Bulk Terminal Leasehold, 11040 N Lombard Street; Marine Terminal 4, Pier 4, Portland Oregon; URS; December 29, 2009.

cc (with attachment):

Marco Ulmer – Kinder Morgan

Bruce Craven – Kinder Morgan

David Ashton - Port

Jeff Krug - Port

Debra Crawford - Port

121 NW Everett Portland OR 97209
Box 3529 Portland OR 97208
503 944 7000

KMB00000408



December 29, 2009

Mr. David Breen
Port of Portland
Marine Terminal 6
7201 N. Marine Drive
Portland, Oregon 97203

**Re: Final Report – Baseline Audit
Kinder Morgan Bulk Terminal Leasehold
11040 N Lombard Street; Marine Terminal 4, Pier 4
Portland, Oregon
URS Project: 25696598**

Dear Mr. Breen:

This report presents the URS Corporation (URS) Final Baseline Audit conducted for the Kinder Morgan Bulk Terminal Leasehold located at the Port of Portland Marine Terminal 4 in Portland, Oregon. The Baseline Audit was conducted according to our September 24, 2007 proposal and was a follow-up to a Phase I Environmental Site Assessment conducted in 2004.

URS looks forward to your comments on this document. Please call Alicia Voss if you have questions or comments about this report.

Sincerely,

URS CORPORATION

A handwritten signature in black ink, appearing to read "JLR", is positioned above the name Jennifer L. Renninger.

Jennifer L. Renninger
Senior Environmental Scientist

A handwritten signature in black ink, appearing to read "Alicia Voss", is positioned above the name Alicia Voss.

Alicia Voss
Project Manager

Attachment: Final Baseline Audit Report

URS Corporation
111 SW Columbia, Suite 1500
Portland, OR 97201-5850
Tel: 503.222.7200
Fax: 503.222.4292

KMB00000409

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1.0 INTRODUCTION

1.1 OBJECTIVES AND SCOPE OF SERVICES

The objective of this Baseline Audit is to establish an environmental baseline, as it existed in 2004 to assist the Port and Kinder Morgan Bulk Terminals (KMBT) in their respective Lease obligations under KMBT's facility Lease as amended in 2004. To accomplish this, this Baseline Audit utilizes (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Standard E 1527-00) as "non-binding general guidance" in gathering reasonably available information regarding current and historical activities on or adjoining the subject property to evaluate whether known or suspect environmental concerns that would represent a "Recognized Environmental Condition" (REC) exist associated with the subject property and the adjoining properties.

The scope of service for this Baseline Audit is detailed in the proposal between the Port of Portland (Port) and URS Corporation (URS), dated June 9, 2004 and our September 24, 2007 Task Order. The Scope of Services includes a review of historical uses of the subject site, a site reconnaissance, contact with local officials and a review of available environmental databases. Consistent with the 2004 proposal, the Phase I ESA was performed and a Draft Report submitted to the Port. At that time, uplands investigations that were relevant to the subject property were ongoing. URS's work scope was modified to enable use of the uplands investigation work completed through 2007 in this environmental baseline. Consequently, URS's 2007 Scope of Services includes a review of these uplands investigations, a review and incorporation of Port comments on the 2004 Draft, and a review of lead-based paint and asbestos-containing materials sampling data. This baseline does not include the testing of soil or groundwater; or surveys or sampling for asbestos, lead paint, drinking water, or radon.

1.2 DEFINITIONS AND TERMINOLOGY

The definitions and terminology used in this report are consistent with the definitions in ASTM Standard E1527-00, the standard current in 2004, unless noted otherwise. The following ASTM terms and definitions are used throughout this report:

Recognized Environmental Condition (REC) – The presence or likely presence of any hazardous substances (as defined pursuant to CERCLA, 42 USC §9601(14), as interpreted by Environmental Protection Agency (EPA) regulations and the courts) or petroleum products (including those substances within the meaning of the petroleum exclusion to CERCLA, 42 USC §9601(14), as interpreted by EPA regulations and the courts) on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis*

conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Any issues identified by URS through its review of historical information, information provided by the Port or in the public domain, or identified during onsite reconnaissance that would meet the above definition is classified in this report as a REC. In addition, URS classifies any government or facility initiated environmental investigation as a REC until data supporting reclassification can be reviewed and evaluated or the government agency requires no further action. For example, an area that is identified as a Solid Waste Management Unit (SWMU) or is under a Resource Conservation Recovery Act (RCRA) Facility Investigation would be classified as a REC. Any cleanup that is planned or underway but incomplete either through a regulatory enforcement action, Consent Order or a Voluntary Cleanup program is classified as a REC.

URS classifies as “*de minimis*” documented or suspected contamination that does not, or is unlikely to present a health or environmental risk and would not, or would be unlikely to trigger an enforcement action based on URS’ understanding of the materials involved and its experience with local regulators at similar facilities. All *de minimis* conditions are not detailed in this report.

Offsite facilities that may impact the subject site with hazardous materials or petroleum products are not classified as creating a REC on the subject site unless, based on available information and in URS’ opinion, such impacts present a material risk of harm to the health or safety of current site occupants or the appropriate governmental agencies would initiate an independent enforcement action against the Port.

Historical Recognized Environmental Condition (HREC) – An environmental condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. The final decision rests with the environmental professional and will be influenced by the current impact of the HREC on the site. If a past release of any hazardous substances or petroleum product has occurred in connection with the site and has been remediated, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a no further action letter or equivalent), this condition shall be considered an HREC and included in the findings section.

For the purpose of this report, an apparent HREC would be classified in this report as a REC if, for example, its remediation or closure would not conform to current minimum regulatory requirements or industry standards for investigation or chemical analyses. Another example could include a site or area that has been remediated, but ongoing groundwater monitoring and reporting is required.

1.3 LIMITING CONDITIONS

URS' ability to complete the scope of services was limited by the fact that information on the subject and adjacent properties held by regulatory agencies and other relevant sources may not have been available for review, or replies from regulators and other relevant sources to URS' requests for this information were not received at the time this report was prepared.

1.4 LIMITATIONS

This Baseline Audit was prepared in accordance with the Scope of Services described in URS' proposal prepared for the Port and subsequent amendments. The work conducted by URS is limited to the services agreed to with the Port, and no other services beyond those explicitly stated should be inferred or are implied.

The conclusions presented in this report are professional opinions based solely upon indicated data described in this report, visual observations of the subject site and vicinity, and URS' interpretation of the available historical information and documents reviewed. They are intended exclusively for the purposes outlined herein and the subject site location and project indicated. URS understands that the Port is in the process of renegotiating its tenant leaseholds at its marine terminals. URS' evaluation of issues and findings reflect this assumption unless noted otherwise.

It should be recognized that this study was not intended to be a definitive investigation of contamination at the subject site and the conclusions provided are not necessarily inclusive of all the possible conditions. Given that the scope of services for this investigation was limited and that exploratory borings, soil and/or groundwater sampling or analytical testing was not undertaken, it is possible that currently unrecognized subsurface contamination may exist at the subject site. URS makes no representations regarding the value or marketability of the subject site or the suitability for any particular use, and none should be inferred based on this report.

Opinions and recommendations presented herein apply to the subject site conditions existing at the time of our investigations and cannot necessarily apply to subject site changes of which URS is not aware and has not had the opportunity to evaluate. Changes in the conditions of this property may occur with time due to natural processes or the works of man on the subject site or adjacent properties. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

URS has exercised due and customary care in the conduct of this Baseline Audit but has not independently verified information provided by others. Therefore, URS assumes no liability for any loss resulting from errors or omissions arising from the use of inaccurate/incomplete information or misrepresentations made by others.

SECTION ONE

Introduction

1.5 RELIANCE

This report shall not be relied upon by any other party without the express written authorization of URS.

URS

2.0 SITE DESCRIPTION

2.1 LOCATION

The KMBT leasehold (subject site) is located at the Port's Marine Terminal 4 in the City of Portland, Multnomah County, Oregon. Terminal 4 is located in the NW ¼ and NE ¼ of Section 2, Township 1 North, Range 1 West of the Willamette Meridian, and is included on the Linnton, Oregon U.S. Geological Survey (USGS) 7.5-Minute Quadrangle map (USGS, 1984). The topography of the subject site is relatively flat, with an elevation of approximately 30 feet above mean sea level (msl). The ground surface consists mainly of asphalt or concrete, with areas of gravel and grass at the perimeter. No surface water bodies are located on the subject site, but it is located adjacent to the Willamette River and is downstream of the St. John's Bridge in North Portland. A Vicinity Map is included as Figure 1.

2.2 SITE FEATURES AND USE

The subject site includes Pier 4 (Berths 410 & 411) of Terminal 4, and is bounded by Slip 3 to the south, the Willamette River to the west, Wheeler Bay to the northwest, and Union Pacific Railroad (UPRR) right-of-way to the east. The approximate 6.56-acre site is leased from the Port. KMBT currently leases Pier 4 and its adjacent area for loading of soda ash onto ships at Berths 410 and 411. The facility is permitted as an export facility for multiple bulk commodities. Material is transferred from rail to ship; or rail to storage to ship. The leasehold includes railroad tracks, a conveyor system with associated buildings, a 30,000 metric ton storage building, and a maintenance warehouse with offices. A Site Plan that indicates major site features is presented as Figure 2.

Additional agreements within KMBT's leasehold include: a Portland General Electric Company (PGE) easement in 1988 for underground electrical utilities; a Pipeline Crossing Agreement (license) from UPRR in 1996 allowing KMBT to construct, maintain, and operate a domestic sewer pipeline; and a Revenue Sharing Agreement with Union Pacific.

In 2006, the Port completed the construction of the Pier 2 rail yard. The project created a nine-track yard for inbound railcars north of the KMBT leasehold. The project also relocated the locomotive tail-track from the dock to a location north of Wheeler Bay. All but two dumper pit / outbound car storage tracks were eliminated on the dock. Portions of the storm water system were modified in 2006 during the Pier 2 rail yard construction.

2.3 UTILITIES

PGE provides electricity to the subject site. Potable water is obtained from the City of Portland's public water system. Sanitary wastewater is discharged to the City of Portland's sanitary sewer system. Storm water discharges through a storm water outfall (which drains into the Willamette

River), or to an on-site wastewater treatment system, which discharges to the sanitary sewer system.

2.4 SITE VICINITY AND ADJOINING PROPERTIES

A limited visual reconnaissance was performed of adjoining properties, and surrounding property uses were discussed with site representatives. The surrounding properties are strictly industrial in nature. Properties or land uses that would be defined as a REC for the subject site were not identified on adjoining properties. Properties and features that surround the subject site are as follows:

North:	Vacant industrial land (paved area owned by the Port) on which the Pier 2II railyard was constructed in 2006.
East:	UPRR right-of-way
South:	Slip 3 (Berths 410 and 411)
West:	The Willamette River

3.0 PHYSICAL SETTING

The physical setting and environmental characteristics of the subject site are based on the site reconnaissance and review of public documents and documents provided by the Port (referenced in Section 8.0).

3.1 TOPOGRAPHY

According to the Linnton, Oregon USGS 7.5-Minute Quadrangle map (USGS, 1984), the topography of the subject site is relatively flat, with an elevation of approximately 30 feet above msl. The ground surface consists mainly of asphalt or concrete, with areas of gravel and grass at the perimeter.

3.2 SURFACE WATER

The nearest surface water to the subject site is the Willamette River, located directly adjacent to the site to the West (Figure 1). The Willamette River flows from the southeast to the northwest and discharges into the Columbia River approximately 4.75 miles to the northwest of the site. Tidal influences from the Pacific Ocean are transmitted through the Columbia River and affect the stage of the Willamette River as far south as Oregon City (approximately 20 miles south and upstream of the site). The adjacent stretch of the Willamette River is not used as a source of potable water, but is used for industrial and recreational purposes.

Surface water drains either across the site into storm water catch basins where it discharges through a storm water outfall (which drains into the Willamette River), or to an on-site wastewater treatment system (which discharges to the sanitary sewer system), or infiltrates into the ground through, and in the vicinity of railroad ballast in the eastern portion of the leasehold.

KMBT's wastewater treatment system diverts soda ash-containing surface water for treatment. Soda ash handling associated with KMBT's operations result in small amounts of soda ash mixing with stormwater and altering the pH. Stormwater from the dock gravity drains or is pumped to a pre-treatment system and then is discharged to the publically owned treatment system (POTW) under a pretreatment permit issued and administered by the City of Portland Bureau of Environmental Services. Over time, KMBT has modified the catch basins around its leasehold to include valves and sumps to divert stormwater and washdown water (from washing machinery and equipment) to the pre-treatment/POTW system. The pre-treatment system includes a 43,000-gallon concrete retention basin, an oil/water separator equipped with a 250 micron filter,; a sulfuric acid mix tank for pH control (equipped with probe for constant pH monitoring), and two surge tanks which were formerly needed to meter discharge rates to meet total dissolved solids limits.

Portions of storm water system were modified in 2006 as part of the Pier 2 rail yard construction.

3.3 GEOLOGY

The subject site is located at the northern portion of the Willamette Valley physiographic province, an elongated, roughly north/south trending alluvial plain that separates the Coast and Cascade mountain ranges. During the late Miocene epoch, uplift and tilting of the adjacent Cascade Range to the East and the Coast Range to the West created the topographically low trough of the Willamette Valley (Orr, et. al., 1992).

The site is underlain by sand consisting of fill dredged from the riverbed. The fill unit is approximately 25 feet thick. The dredge fill is underlain by alluvium that consists of an upper coarse-grained unit and lower fine-grained unit. The upper alluvial unit consists of sand or sand and clay. The lower portion consists of silt and clay. The alluvial unit is approximately 180 feet thick (URS, 2004).

The sedimentary deposits are underlain by the Miocene- to Pliocene-aged Troutdale Formation, which consists of various subunits. In the vicinity of the site the Troutdale Formation is composed primarily of well-sorted sand and gravel with cobbles. The Troutdale Formation is underlain by volcanic rocks of the Columbia River Basalt Group. Near the subject site the Columbia Basalt Group consist of primarily dense, fine-grained basalts. The depth to bedrock below the site is expected to be approximately 800 feet bgs (Swanson, et. all. 1993). These volcanic rocks reach a thickness of at least 1,000 feet.

3.4 HYDROGEOLOGY

Groundwater is not used as a potable drinking water supply for the subject site or immediate area. The site overlies an unconsolidated, unconfined aquifer that consists of Pleistocene- and Holocene-aged alluvium deposited along the major rivers of the area, overlain by dredge fill.

Tidal influence from the Pacific Ocean is transmitted through the Columbia River and affects the stage of the Willamette River in the site area. These fluctuations are expected to have a limited influence on groundwater levels beneath the subject site. Based on groundwater data from nearby borings and monitoring wells, depth to groundwater is between 15 to 25 feet bgs across the site. Groundwater depths are anticipated to vary seasonally, with shallower groundwater depths occurring during the wetter winter season.

The direction of groundwater flow in the unconsolidated formation is assumed to generally follow topography and move in a westerly direction, toward the Willamette River and Wheeler Bay, or south towards Slip 3. Groundwater flow direction was not verified through direct measurement of monitoring wells.

4.0 PREVIOUS ENVIRONMENTAL REPORTS AND SITE HISTORY

The history of the subject and adjoining properties was developed with information provided by the Port and the review of one or more reasonably ascertainable standard and other historical sources referenced below and in Section 8.0.

4.1 PREVIOUS ENVIRONMENTAL REPORTS

The Port provided documents containing information relating to historic and current site operations and activities. The documents are listed below in descending chronologic order, followed by a summary of the report findings:

4.1.1 Documents

Terminal 4, Electrical Transformer Locations, Site Plan, Drawing Number T4 85-12 (The Port of Portland, 1985)

- This is a site map referencing the locations of former PCB-containing transformers and is included in Appendix A.

Tank Management Manual-Marine Terminal 4 (Century West Engineering Corporation, 1995)

A Storage Tank Location Map in this report shows one existing and one pre-existing UST on the subject site near the pit/rail dump building. The following provides a description of the USTs:

- Tank T4-24 was a 10,000-gallon capacity underground storage tank owned by KMBT that was formerly located north of the northeast corner of the pit/rail dump building. The tank was likely decommissioned and replaced by T4-43. No other information was provided. The tank was referenced on a Port drawing M86-4 8/10.

Tank T4-43 is a 5,000-gallon double-walled fiberglass diesel tank owned by KMBT which is located north of the northwest corner of the pit/rail dump building. The tank is registered with DEQ (UST File Number #9786). The tank is equipped with interstitial leak detection, but does not have system piping leak detection.

Excerpts from this document are included in Appendix B.

Terminal 4 – Track 401 Soil Sampling Project (URS Corporation, June 2001)

In 2001, in preparation of Track 401 repair work, URS, at the request of the Port, collected soil samples along the Track 401 alignment to characterize shallow materials for proper management. The repair work included removing and replacing materials beneath approximately 710 linear feet of track.

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Soil was assessed based on the known presence of pencil pitch and the historical usage of the rail segment. Discrete soil samples were collected from five locations along the rail segment. At each location, samples were collected from depths of 0 to 6 inches, 6 to 12 inches, and 12 to 16 inches bgs, composited into three samples based on the depth of sample collection, and analyzed for total metals and metals by toxicity characteristic leaching procedure (TCLP). The analytical results indicated a maximum leachable lead concentration (by TCLP) in the shallow soil of 194 mg/L. At the intermediate and deep samples, TCLP maximum lead concentrations were 2.42 mg/L and 0.13 mg/L respectively, suggesting minimal leaching potential of lead from the surface soil.

Based on the results, URS concluded that the lead-impacted soils were probably limited to the shallow interval, but may be present in the intermediate interval as well. Recommendations included segregating soils during the track work and disposing of portions of the soil as hazardous waste based on the analytical results.

Constituents of interest in the railroad alignments were subsequently addressed in the Remedial Investigation (RI). The results of the RI work are discussed in Section 7.

Draft Remedial Investigation Work Plan, Port of Portland, Terminal 4 Slip 1 Upland Facility (URS Corporation, May 2004)

Historical information related to Terminal 4 and the subject site was excerpted from this document and is included in Section 4.2.

Asbestos and Lead-Based Paint Survey Report, Dravo Crane T4 Portland, OR prepared for Port of Portland (PBS Environmental, December 15, 2006)

In 2006 PBS, performed a pre-demolition hazardous materials survey of accessible areas of the Dravo Crane at T4 to locate suspect asbestos containing material (ACM), lead based paint (LBP) and other hazardous materials that may be impacted by demolition of the Dravo Crane. Samples were collected from wall panel coating, brake and clutch pads, and electrical components from the mechanical house wall, winch motor brakes and the mechanical house. ACM was identified in the wall panel coating, brake pads and electrical components. PBS noted that additional quantities may be discovered during the demolition of the crane. Representative LBP chips were collected from the Dravo Crane. Samples indicated lead concentrations ranging from 11,600 ppm to 31,500 ppm. It was noted that the paint was peeling and in poor condition at the time of the survey. One paint sample was also tested for RCRA 8 Metals. Analytical results showed concentrations of barium (71 ppm), chromium (11,000 ppm) and lead (348,000 ppm). The concentration of lead reported was later determined to be erroneous (see following section). Additional potential environmental hazards associated with the contemplated demolition were also reported for the crane, including hydraulic fluids associated with the crane's systems and pigeon excrement which have posed a respiratory hazard to demolition workers. A copy of this report is included in Appendix C.

Wy'East Laboratory Report #62887 to PBS Environmental, (December 15, 2006)

An error was made in calculating the lead concentration of sample 2001/R6094 in connection with the pre-demolition assessment of the Dravo. The initial concentration was reported at 348,000 ppm, but was later recalculated with a resultant concentration of 26,200 ppm. A copy of this corrected Lab Report and accompanying transmittal letter is included in Appendix D.

Phase II Pencil Pitch Investigation Report Terminal 4 Slip 3 Upland Facility (Ash Creek Associates, Inc. July 2007)

Ash Creek Associates performed a second phase of characterization to assess the lateral and vertical extent of PAHs associated with pencil pitch observed in riverbank soils near Slip 3. The work was conducted pursuant to a Voluntary Cleanup Program (VCP) agreement between the Port and DEQ (June 27, 2002), a Record of Decision (2002 and 2003), and a Consent Judgment dated October 2004. The objective of the investigation was to determine whether pencil pitch or PAHs were present in potentially erodible soils along the riverbanks of the uplands Slip 3.

The initial pencil pitch investigation (2005) did not fully define the extent of the PAHs associated with the pencil pitch in the riverbank areas. Concentrations of PAHs were detected in the river bank and slip 3 bank areas above Probable Effects Concentrations (PECs). Additional characterization was recommended to fully characterize the extent of the PAHs and to assess appropriate remedial actions. The slip 3 bank area is located at the southeast corner of the KMBT leasehold boundary. The river bank area is located across the Slip 3 and south of the leasehold boundary approximately 500 feet.

The Phase II investigation included three separate sampling events (February, March and April 2007) from which samples were collected and submitted for TPH and PAH analyses. Samples collected from the slip 3 bank area were collected from the upland soils at depths of 0-2.5 feet and at five feet. Slip 3 bank samples contained PAHs at concentrations exceeding one or more RBC at the 0-2.5 feet depth, while none were reported above the RBCs at a depth of five feet. Analysis of river bank samples indicated that certain PAH concentrations exceeded PECs. Ash Creek recommended removal of shallow soils (upper 2 feet) in the slip 3 bank area and replacement with clean fill and riprap. For soils located in the upland area, capping the impacted area with asphalt was recommended. A source control plan for the Riverbank area was also recommended.

Currently, a Source Control Measure Alternative Evaluation is being prepared by the Port to assess an appropriate source control measure (SCM) to mitigate the potential for the soil to erode into the river. In addition, a Contamination Media Management Plan (CMMP) is being prepared to identify and document the appropriate actions to limit human exposure to this soil.

Remedial Investigation Report. Terminal 4 Slip 1 Upland Facility, prepared for the Port of Portland (Ash Creek Associates, Inc. August 2007)

Ash Creek Associates performed a Remedial Investigation of the upland portion of the Terminal, Slip 1 area during 2004 and 2005. This report summarizes the results of three phases of

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Remedial Investigation (RI) sampling activities that were carried out in order to characterize soil and groundwater conditions in this upland area. Select figures from the report are included in Appendix E. This report does not discuss the adjacent in-water studies (below the line of ordinary low water), nor does it discuss the information regarding the storm water system. The RI report covers the entire Terminal 4 Slip 1 area, dividing it into two operable units: Operable Unit 1 (OU1), which is uplands north of Slip 1, and Operable Unit 2 (OU2), which is uplands east and south of Slip 1 and extends to the bank of Slip 3 (see Figure 5 in Appendix E). The subject KMBT property consists of a small portion of Terminal 4 near the southern boundary of OU2 (see Figure 1 in Appendix E).

Based on historical data, site observations, and interviews, 48 areas of concern (AOCs) were identified during the scoping of the RI process. Only three of these initial AOCs were on the subject property: AOC 54 (Hall-Buck UST - T-24), AOC 57 (referred to in the RI as the “Kinder Morgan Former Railcar Wash Area”), and AOC 73 (Berth 411 Pencil Pitch Handling Area) (see Figure 6 in Appendix E). Subsequent to the completion of the RI, KMBT communicated to the Port that a railcar wash area never existed on its leasehold. Port review of historical Terminal 4 records did not identify information reflecting the presence of a former railcar wash area within the leasehold. In 2009 URS was not able to reconfirm the railcar wash area historic information.

Two additional AOCs, AOC 63 (Former Ore/Product Handling and Storage Locations), and AOC 83 (Erodible Bank Areas) are adjacent to the subject property, located between the subject property and the Willamette River, and one AOC, AOC 72 (Railroad Alignments) is located to the northeast. Although not discussed quantitatively in this report, storm water discharge to the Willamette River is also a potential concern. The subject property is almost entirely contained within storm water Basin L, which discharges to the river at Outfall L (see Figure 4 in Appendix E). A small portion of the leasehold is within storm water Basin K.

During the three phases of the RI, a total of 134 surface/shallow soil samples (0 to 3 ft below ground surface [bgs]), 49 subsurface soil samples, 77 grab groundwater samples, and groundwater samples collected from 24 wells over the period of one year, were collected and analyzed for a wide variety of chemicals of interest (COIs). The data were screened against the following preliminary screening levels:

- Human Health for Soils – EPA Region 9 preliminary remediation goals (PRGs) for industrial soils (EPA, 2004) and Appendix A of the Oregon DEQ guidance for Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sediments (DEQ, 2003).
- Ecological Receptors for Soils – DEQ Screening Level Values (SLVs) for terrestrial receptors (DEQ, 2001).
- Human Health for Groundwater – Federal Ambient Water Quality Criteria (AWQC) for protection of human health regarding fish consumption (EPA, 2002).

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- Ecological Receptors for Groundwater – Federal AWQC continuous concentration (CCC) values for freshwater biota (EPA, 2002) or DEQ SLVs for aquatic biota (DEQ, 2001).

Multiple soil and groundwater samples had COI concentrations exceeding one or more of the above screening values. However, with the exception of a few localized areas of soils (none of which are on the subject property), the COIs were detected intermittently and at low concentrations. On the subject property, one surface soil sample contained lead and zinc concentrations exceeding the terrestrial SLVs, but no human health PRGs were exceeded. Groundwater samples from two of the four monitoring wells on the subject property (MW-15 and MW-16) exceeded human health and/or ecological screening levels for arsenic, copper, lead, cadmium, carbon disulfide, and multiple polycyclic aromatic hydrocarbons (PAHs).

According to the RI report, human health and ecological risk assessments concluded that, except along the erodible riverbank, complete pathways generally do not exist to link contaminated soils to potential receptors. The report states that lack of access limits human exposure to the few areas of contaminated soils. Similarly, it concludes that insufficient habitat exists to attract terrestrial receptors to the area so the occasional exceedances of terrestrial soil SLVs should not be considered a concern. Regarding groundwater, the RI states that the only beneficial use of the site groundwater is discharge to surface water (i.e., the Willamette River). The RI report further concludes that many of the observed groundwater screening level exceedances are the result of entrained soils (and therefore are not representative of dissolved groundwater concentrations). For those groundwater COIs which consistently exceed screening levels, a mixing model was used to predict COI concentrations in surface water after discharge to the river. Based on the results of the model, the RI report concluded that the groundwater does not pose an unacceptable risk to humans or wildlife.

The RI report concluded that no groundwater remediation or source control was required. With regard to the soils, the report states that the erodible riverbank soils were recommended for remedial action and source control options were being evaluated. The report also identified two limited areas in OU1 (away from the subject property) that may require remediation following additional study.

Storm water runoff from the subject property discharges to the Willamette River from Basin L through Outfall 001. The Port is currently conducting a storm water characterization and source control evaluation at Terminal 4 Slip 1 and Slip 3 as required by DEQ under the Voluntary Cleanup Program agreements. Two milestone reports submitted by the Port to DEQ for this effort, include: *Final – Storm Water Data Summary Report, Terminal 4 Slip 1 and Slip 3 Uplands Facilities, March 2009* and *Storm Water Source Control Evaluation, Terminal 4 Slip 1 and Slip 3 Upland Facilities, September 2009*. Data presented in these report suggest that PAHs, PCBs, pesticides, and metals may be discharging to the river at concentrations exceeding acceptable levels based on DEQ's conservative screening level values. This evaluation is ongoing to assess what, if any, storm water source control measures are needed at these Upland Facilities.

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Remedial Investigation Acceptance Letter from DEQ to Nicole LaFranchise of the Port of Portland, dated October 8, 2007.

DEQ issued a letter to the Port, dated October 8, 2007, accepting the August 2007 Remedial Investigation Report without further comment. DEQ acknowledged that the stormwater evaluation was not completed and requested the Port submit the results as an RI addendum when complete. With the conclusion of the RI work, DEQ requested commencement of the Feasibility Study.

4.1.2 Interviews

Mr. Brad Clinefelter (Terminal Manager) and Mr. Marco Ullmer (Regional Environmental, Health & Safety Manager) of KMBT were interviewed on June 16, 2004 by Mr. Matt Mudge of URS. They led a tour of the facility operations that included physical inspection of all buildings and staging areas. Information discussed with Mr. Clinefelter and Mr. Ullmer included but was not limited to, site history, site use, hazardous substance storage and use, waste disposal areas, and sewer or septic systems.

Mr. Phil Ralston (Port Environmental Project Manager) was interviewed on June 16, 2004. He provided additional information regarding past and present site use, and future plans for the subject site.

David Breen (Port of Environmental Project Manager) was interviewed on October 18, 2007. He accompanied Ms. Jennifer Renninger of URS around the site. Ms. Jennifer Fonseca-Littrel (Port Property Administrator) was contacted on December 3, 2007 regarding PCB and LBP sampling results for the Dravo Crane.

Ms. Renninger also interviewed Mr. Brent McMullen of the KBMT via telephone on December 3, 2007. He provided information regarding USTs at the site and PCB containing equipment. Copies of UST permits are included in Appendix F.

4.1.3 Other Information

Asbestos – In accordance with the Scope of Services, URS did not conduct an asbestos survey or evaluate the adequacy of the documents reviewed.

Lead Paint – A lead-based paint survey was not conducted as part of this Phase I ESA.

Drinking Water – Tests of the drinking water quality within the subject site was not performed for this Phase I ESA.

Radon – Tests for radon within the subject site buildings was not performed for this Phase I ESA.

4.2 HISTORICAL REVIEW

The following text is excerpted from the Terminal 4 Slip 1 Upland Facility Remedial Investigation Work Plan, prepared by URS for the Port and has been updated where appropriate.

4.2.1 Physical History

The landscape and physical features of Terminal 4 have changed significantly in the past century with the preparation of the land for use as a marine terminal. What was once Willamette River floodplain occupied by grasslands, wet prairies, and small ponds was modified by grading, dredging, and filling beginning as early as 1906.

Prior to development, the banks of the terminal location were lined with trees, and a former drainage way identified as Gatton Slough (which discharged to the Willamette River) traversed the northern portion of the Terminal. A small stand of trees was located on the floodplain immediately south of the slough, beyond which were several small swales and ponds. The remainder of the area was occupied by grasslands, which were probably wet prairies. A U.S. Coast and Geodetic Survey map from 1895 depicts a building (possibly a farmhouse) located at the eastern edge of the floodplain (southeast of the location of the now-removed Warehouse 6) along with a series of trees suggestive of a small orchard.

In 1897, the Ogden family purchased the land around lower Gatton Slough. They built a house on the higher ground overlooking the floodplain, probably close to the modern entrance to Terminal 4 on North Lombard Street. In addition to farming, the Ogden family reportedly drilled for oil near the mouth of the slough, without success.

The rural landscape portrayed in the 1895 map began changing in the first decade of the 1900s. The first development at Terminal 4 occurred in 1907 to 1908 when the Oregon-Washington Railroad and Navigation Company (OWR&N Co., a Union Pacific Railroad affiliate and part of the Union Pacific Railroad system, hereafter referred to as Union Pacific) constructed a railroad along the eastern edge of the floodplain (the railroad alignment now serves as the eastern boundary of Terminal 4). By 1912, Union Pacific had constructed its oil-supply dock for locomotives and, on the east slope above the rail tracks, the St. Johns Tank Farm which was used as a locomotive fueling station. Photographs from 1917 indicate that an oil pipeline extended east from the river across the floodplain to the tank farm. The oil pipeline later became an underground structure, and was presumably buried when the area of Slip 3 was filled and graded for development. The date of burial, however, has not been verified. The pipeline alignment was along the south side of where Slip 3 would later be constructed. The oil was pumped uphill from the oil-supply dock to the tank farm.

In 1917, the site preparation for the development of Terminal 4 began. Trees and other vegetation were removed over most of the floodplain in the northern Terminal 4 area, and dredged fill material was deposited across the low-lying ground and then leveled with horse teams. Most of lower Gatton Slough was filled at this time as well. Beginning about the same time, fill was also placed into the offshore shallows to extend the riverbank out into the channel.

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The 1895 U.S. Coast and Geodetic Survey map labeled the offshore area as “Linton Shoal,” with water less than a meter deep in places. Filling this area was relatively easy and provided the new Terminal 4 with a larger land base. As described in more detail below, the northern Terminal 4 facilities included Piers 1 and 2 at Slip 1 and Pier 5 at Slip 3. A Slip 2 was planned and partially excavated but never completed. The remnant Slip 2 is known today as “Wheeler Bay.” Photographs taken in 1917 trace the rapid transformation of this landscape.

Pre- and post-construction maps of and plans for Terminal 4 indicate that substantial changes occurred in the landscape with the development of Terminal 4 from 1917 to approximately 1921. First, construction of the terminal involved placement of fill that extended 650 to 975 feet (ft) from the original riverbank. Second, the construction of Slips 1, 2, and 3 also required excavations into the original shoreline. Slip 1 was located at the entrance to Gatton Slough, and the head of the slip extended up to 650 ft inland from the original riverbank. These excavations probably removed much of the upriver portion of the mouth of the slough; the downriver portion of the slough entrance was covered by Houses 1 and 2 at Pier 1 and portions of the grain complex. The inland excavations for Slips 2 and 3 (although Slip 2 was never finished) extended from 440 to 565 ft back from the original shoreline. The northern portion of Terminal 4 was thus developed through a combination of fill outward from the original riverbank and excavations into the original floodplain. All traces of lower Gatton Slough were lost either through burial under fill or removal for the creation of Slip 1.

4.2.2 Property Acquisition and Development

Originally called the St. Johns Municipal Terminal, Terminal 4 was developed by the City of Portland Commission of Public Docks (City CPD) as a result of the push by the City to become a world-class shipping port and to capitalize on growth in the shipping industry following the opening of the Panama Canal in 1914. Following the physical preparation of the land, the City CPD initiated construction for development of the property as a marine terminal.

The main building construction and other physical developments at Terminal 4 are summarized in Table 1 below. Note that warehouses at Pier 1 were called “houses,” while those at Pier 2 were called “warehouses.”

Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1906-07	St. Johns Tank Farm (with storage tanks and a pipeline to a terminal dock) constructed by Union Pacific at the future location of Slip 3; the facility handled Bunker C fuel oil for fueling steam locomotives south of modern Slip 3.

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Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1917	\$3,000,000 bond levy approved on June 17, 1917 for land purchase and development. City CPD purchases 117.55 acres of upland and purportedly 36 acres of submerged land centered on Gatton Slough.
1917-20	Slips 1 and 3 dredged and Pier 1 (Berths 403-405), grain elevator, operating house, storage bins, track shed, and Warehouses 1-5 constructed. Spur tracks from existing Union Pacific lines constructed.
1919	Liquid bulk storage facility constructed at the head of Slip 1; House 4 constructed.
1919-20	Pier 2 and Berths 406-408 constructed. Vegetable oil weighing house constructed east of Slip 1.
1920	4.94-acre parcel acquired from Union Pacific adjacent to Slip 3; however, parcel developments (pipeline, oil supply tanks, and fuel oil dock) remained under ownership of Union Pacific. Flour mill, adjoining concrete warehouse for grain and flour, and Berth 409 constructed. Houses 1 and 2 constructed on the upstream side of Slip 1. Boiler house and service buildings (including an administration building, cafeteria/restaurant, and welfare building) constructed east of Slip 1.
1920-21	Substructure for Piers 3, 4, and 5 constructed (although Pier 3 was never completed). Quay dock, bulk handling facility, and Berths 412 and 413 completed on the upstream side of Slip 3. Union Pacific pipeline extended to service Berth 412 at Pier 5, Slip 3.
1920-24	Filling platform for liquid bulk storage facility constructed east of Slip 1.
1921	Storage bunkers constructed east of Slip 3.
1921-22	Warehouses 6 and 7 constructed on Pier 2, Slip 1 serviced by Berths 406 and 407.
1922	House 5 constructed perpendicular to House 4 along the river.
1923	Houses 6, 7, and 8 were constructed perpendicular to House 5 as a cold storage plant and ventilated warehouse. A 150,000-gallon elevated water tank was constructed. H.R. Leckenby fumigation plant constructed.
1930	Grain storage annex constructed north of the grain elevator.

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Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1931	Tanks added to liquid bulk storage facility.
1932	Gearlocker building constructed north of the liquid bulk storage facility.
1940-41	Berth 401 and Airveyor system for unloading bulk grain from barges constructed on the harbor side of Houses 4 and 5 at Pier 1 for grain unloading.
1942	At the onset of WWII, the U.S. Army Transport Service (ATS) leased Terminal 4 from City CPD for Portland's Sub-Port of Embarkation. ATS added a second story to the gear locker building. The ATS rehabilitated the loading apron at Pier 1, replaced decking and rehabilitated railroad track at Pier 2, and rehabilitated the slip side of Pier 5.
1944	Auxiliary pipeline constructed by the ATS at Slip 3 Pier 5.
1946-47	The ATS relinquished Terminal 4 to City CPD. Bulk loading facility constructed at Berth 412 on the slip side of Pier 5.
1948	20-acre parcel south of Pier 5 acquired from Union Pacific.
1951	A railcar dumper and a hydraulic truck unloading hoist and dust collection system were added to the grain facility at Pier 1.
1953	Oil packaging plant constructed and eight aboveground storage tanks (ASTs) and an underground transfer pipeline installed at the head of Slip 3 by Quaker State for oil storage.
1954	Eight steel ASTs for grain storage constructed east of the grain storage buildings at Slip 1. Electric elevator system at grain elevator modernized.
1955	Pier 2 rehabilitated and two gantry cranes added. Berths 410 and 411 constructed on the downstream side of Slip 3. Fumigation plant removed.
1957	Berth 401 renovated.
1957-58	19.64-acre parcel upstream of Pier 5 acquired from Multnomah County.
1958	Second gallery for grain loading added at Pier 1.

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Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1962	Pier 5 harbor-side wharf and Berth 409 at the head of Slip 1 removed. Dravo bulk unloader installed at Pier 4.
1963	Head of Slip 1 developed as small boat landing.
1966	Five tanks constructed by Pacific Molasses added to liquid bulk storage facility.
1968	Warehouse 4 constructed at Pier 2. Matson Navigation Co. installed 33-ton-capacity container crane on Pier 2. Three 36-ton revolver cranes purchased and installed at Pier 4.
1968-69	Berths 404 and 405 reconstructed (Berth 405 to handle offloading of barges for grain). Coal bunkers removed at Pier 5.
1971	Grain elevator remodeled; Union Pacific abandoned existing pipeline to St. Johns Tank Farm and installed a replacement pipeline. City CPD merged with the Port of Portland. Terminal 4 property and operations transferred to Port as part of the merger.
1973	Land purchased from Broadway Holding Company. House 8 demolished at Pier 1. Berth 417 constructed southwest and upstream of Slip 3.
1975	Berth 401 reconstructed to handle ships, adding grain loading equipment and conveyor system.
1978	Cold storage plant and ventilated warehouse (Houses 6 and 7) at Pier 1 removed.
1983	Union Pacific's operation of the St. Johns Tank Farm tanks and replacement pipeline ceased.
1984	Boat landing at the head of Slip 1 removed and ro-ro dock, called Berth 409, constructed in its place. Service buildings removed, including an administration building, cafeteria/restaurant, and welfare building. Whirley cranes removed from Berths 410 and 411.
1985	Quaker State ASTs and underground pipeline removed.
1986	City of Portland began construction of Outfall 52C and the associated storm sewer system serving Lombard Street properties.

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Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1987	Bulk out-loading facility constructed at Pier 4 by Hall-Buck Marine. PCBs were removed from the Dravo at this time. Construction of City drainage system and Outfall 52C at the head of Slip 1. Tanks removed from Union Pacific's St. Johns Tank Farm.
1988	Diesel and gasoline underground storage tanks and fueling station installed by Oregon Terminal Company on the south side of the at the gearlocker building.
1989	Second railcar dumper added to grain facility. Two pipes added at Pier 1 for liquid bulk storage facility.
1990	House 4 condemned.
1991	Guard station constructed.
1992	Four of the steel ASTs for grain storage (east of the storage bins to the north of Slip 1) modified.
1992-93	Downstream row of tanks at original liquid bulk storage facility removed.
1994-95	All but five of the tanks remaining at liquid bulk storage facility removed.
1995	Soda ash storage building constructed at Pier 4.
1996	House 1, House 2, Berth 406, and Berth 407 at Pier 2 dismantled
1996	Oregon Terminal Company's diesel and gasoline underground storage tanks removed.
1997	Pipeline for liquid bulk storage facility rebuilt under Berth 408.
1997-98	Portions of Union Pacific's decommissioned/abandoned St. Johns Tank Farm pipeline removed from under Berth 412 and elsewhere.
1999	Houses 3, 4, and 5 and Berths 403 and 404 demolished. Mechanical/electrical building and bridge to Berth 401 constructed.

4.2.3 Historical Terminal Operations

The City of Portland Commission of Public Docks (City CPD) owned and operated the Terminal 4 property from 1917 to 1971. Activities that occurred on the Terminal 4 property pertinent to this audit during City CPD ownership included 1920pencil pitch, petroleum products, soda ash, talc, sulfur, zinc, lead and copper ores/concentrates, bentonite clay, coal, coke, and iron briquettes. Historical tenant operations at Terminal 4 relating to the current KMBT leasehold area are discussed below.

Ore and Concentrate Handling

From 1955 to 1956 and in 1963 (during CPD ownership), alumina/bauxite and chromite were handled at Pier 2 (Berths 406-408) and Pier 2 (Berths 410 and 411). Starting in 1955, lead and zinc concentrates were directly transferred from ships in Slip 1 to open Union Pacific gondola rail cars by two gantry cranes at Pier 2 equipped with clamshell buckets. The transfer of lead and zinc concentrates at Terminal 4 was relocated to Pier 5 at Slip 3 (Berths 412 and 413) in 1961 with the completion of Pier 4 at Slip 3 and the Dravo bulk unloading tower and continued through 1971. KMBT (then known as Hall-Buck) entered into a lease agreement with the Port on October 30, 1987 to construct and operate a facility for the import of pencil pitch, export of soda ash, bulk clay, and compatible mineral bulk products at Slip 3, Berths 410, 411¹ and 412. KMBT also held a lease for the Dravo which terminated on June 14, 1998. KMBT currently leases Pier 4 and adjacent area for loading of soda ash onto ships at Berths 410 and 411. Soda ash, initially exported from Pier 5, Berth 412, became a major export in 1988, when loading was transferred to Pier 4, Berths 410 and 411, where a new bulk outloader was constructed by KMBT. The Dravo unloading tower remained in service until 1998, when it was decommissioned.

Pencil Pitch Handling

Pencil pitch is a coal tar distillate used as anode material at aluminum refineries throughout the Pacific Northwest. It is manufactured by extruding finger-width coal tar pitch "pencils." The pencil pitch was manufactured in Germany and China and purchased by Koppers Industries, Inc. Ships carrying the pencil pitch were moored at Berth 411 in Slip 3. Longshoremen removed the pencil pitch from the ships' holds by means of the clamshell-equipped Dravo unloading tower on Pier 4 and loaded it directly onto truck trailers or rail cars adjacent to the pier. Available Port records indicate that pencil pitch was handled at Terminal 4 from 1978 to 1998.

Jones Oregon Stevedoring held agreements with the Port to unload pencil pitch at Berths 410 and 411. Jones had the Bulk Cargo Handling pencil pitch contract from July 1, 1980 through June 30, 1981. Jones also had the pencil pitch unloading contract for July 1, 1982 to June 30, 1983.

¹ 09-22-1987 Permit of entry for Hall Buck, page 2

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Stevedoring Services of America was the stevedore for 8 pencil pitch vessel unloadings between September 1985 and December 10, 1987.

From March 9, 1988 to June 14, 1998, pencil pitch unloading was handled by KMBT. In 1998, KMBT ended bulk import of pencil pitch at Terminal 4. The Dravo unloading tower was decommissioned that same year.

4.2.4 Permits

The following environmental permits and applications relevant to the subject property through 2004, were identified by the Port in available records and presented in the Port's 104(e) response to EPA Region X. URS did not review the Port's 104(e) response.

- On September 11, 1984, DEQ issued Air Contaminant Discharge Permit Number 26-2909 for the discharge of exhaust gases from the bulk commodity import and export facility.
- On November 19, 1984, Greenway Permit #GP 24-84 was issued by the City of Portland, Bureau of Planning to construct a dry bulk handling facility.
- On December 17, 1984, DEQ issued Air Contaminant Discharge Permit Number 26-2909 to the Port for the dry bulk handling facility.
- On March 11, 1985, DEQ issued Waste Discharge Permit No. 100039 to the Port to discharge wash water to the river.
- In 1988, DEQ transferred the Port of Portland's Air Contaminant Discharge Permit 26-2909 and Waste.
- On October 2, 1987, the City of Portland issued a conditional permit for a one-time discharge of wastewater generated from pencil pitch unloading to the sanitary sewer.
- On March 11, 1989, DEQ issued an NPDES Waste Discharge Permit Number 999865 to the Port for the dry bulk handling facility.
- On April 4, 1989, DEQ issued Hall-Buck a modification to their Air Contaminant Discharge Permit No. 26-2909.
- On September 1, 1991, the City of Portland issued waste discharge permit (400-027) to Hall-Buck Marine to discharge industrial wastewater to the City's sewer system.
- On September 1, 1991, the City of Portland issued a modification to Industrial Waste Discharge Permit 400-027 for Hall-Bulk Marine.

- On October 9, 1992, DEQ issued Storm Water Discharge Permit 1200-T to Hall-Buck Marine to discharge storm water to public waters.

4.2.5 Regulatory Compliance and Hazardous Substances Releases

This section presents available information on regulatory compliance and hazardous substance release information through 2004.

- On May 7, 1971, a release of a small quantity of bauxite ore occurred to the Willamette River during unloading operations on the vessel M/V DONA AMALIA at Pier 4.
- On March 8, 1981, a large oil spill was found at Berth 414 after the vessel PACIFIC QUEEN departed and reportedly cleaned its bilges. The Coast Guard and DEQ were notified.ⁱⁱ
- On January 30, 1985, an oil slick at the bow of the vessel CELTIC PRINCESS at Berth 410 was observed. The vessel crew said they were not responsible for the oil slick and its origin remains undetermined.ⁱⁱⁱ
- On March 26 and 27, 1986, Coastguardsmen observed pencil pitch being washed from the pier into the river.^{iv}
- On March 28, 1986, a report was made to the U.S. Coast Guard that 300-500 pounds of pencil pitch was washed into the river at Berth 411.^v
- On March 31, 1986, the U.S. Coast Guard observed pencil pitch in the Willamette River at Terminal 4. The pencil pitch was from the pier being washed into the river.^{vi}
- On December 2, 1986, the U.S. Coast Guard observed a small quantity of pencil pitch dust that was blown into the water from pier.^{vii}
- On April 1, 1987, the Coast Guard observed pencil pitch being hosed down from the pier and into the water.^{viii}

ⁱⁱ POPGPA00171133 (pg 6 in brief case)

ⁱⁱⁱ POPGPA00171123 (pg 6 in brief case)

^{iv} POPGPA0010334, pg 6 (pg 4 brief case)

^v POPGPA00103384 (pg 6 in brief case)

^{vi} POPGPA00103695 (pg 6 in brief case)

^{vii} POPGPA00103344 pg 6

^{viii} POPGPA00103344, pg 6 (pg 4 brief case)

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- On October 16, 1987, pencil pitch was spilled into the Willamette while Jones Oregon Stevedoring was unloading the vessel PARKGRACHT. Approximately one or more patches 200 to 250 feet long by 30 feet wide were floating in the river.
- On November 17, 1987, the Port identified the following leaking PCB transformers at Terminal 4:
 - 225 KVA PCB (Serial #C862333) – transformer inside the Dravo machinery house. A moderate amount of fluid leaked from transformer side of upper fill/vent valve. There is no indication the oil was released outside of the machinery house and this transformer has since been removed.
 - 500 KVA transformer (Serial #C862942), 12,000 V to 480/227 V – located inside the Pier 4 transformer house. A slight leak from the drain valve resulted in a spot of fluid on the floor. There is no indication the PCB fluid was released outside of the transformer house and this transformer has since been removed. PCBs were removed as part of KMBT's upgrades in 1987/1988.
- On December 30, 1988, March 21, 1989 and May 23, 1989, Notices of Non-Compliance were issued to the Port for soda ash spills at Berth 411. On April 25, 1989, approximately 35 gallons of PCB-containing fluid was released at the Pier 4, Berth 411 electrical substation by W.R. Grasle Company. The spill was contained within the transformer room and an underlying utility tunnel. A cleanup was conducted by Riedel Environmental Services for WR Grasle under EPA oversight. Chemical Waste Management (CWM) transported and disposed of the contaminated soils from the PCB spill to their facility in Arlington, Oregon.
- On May 23, 1989, DEQ issued a Class II Violation to KMBT for visible emissions in excess of 20% opacity for a period aggregating more than thirty seconds in any one hour.
- Numerous releases of pencil pitch occurred at the Slip 3 Facility during the period Hall-Buck was handling the material and pencil pitch is an identified contaminant source in the upland soils and in-water sediments of Slip 3. Hall-Buck was cited by DEQ for numerous violations for pencil pitch handling. Documented releases of pencil pitch into the air, onto the Terminal, and/or into the river include the following incidents/notifications: March 15, 1988; January 5, 1990; February 25, 1992; March 2, 1992; May 28, 1993; July 30, 1996; September 25, 1996; and June 18, 1997.
- On March 7, 1992, a leak at Berth 411 occurred from a Brix Maritime barge fueling the vessel GORGOVA. The U.S. Coast Guard and a Brix investigator came to the site to evaluate the release.^{ix}

^{ix} POPGPA00153180 (pg 5 in brief case)

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- Between February 21 and 25 [or March 1 and 4], 1992, during unloading of the vessel the M/V AGNESS, Hall-Buck released pencil pitch into the air. Fugitive dust from the release covered aluminum ingots being unloaded at Slip 1 Pier 2 and that operation had to be shut down pending cleanup of the material. Hall-Buck agreed to conduct a washdown of the affected areas and washdown water was subsequently collected and discharged to the sanitary sewer under Hall-Buck's Permit 400-027.
- On April 7, 1992, during transfer activities at Berth 411, approximately 300 gallons of black oil was released; the spill was reportedly contained on the vessel KEN SPANKER.
- On July 27, 1992, approximately 0.12 gallons of diesel released to river from overfilling during fueling operations on the carrier ANSAC PROSPERITY at Hall-Buck at Berth 411. Sorbents were used to collect the product.
- In December 1992, the U.S. Coast Guard observed a minor oil release to the Willamette River at Slip 3. The Port contracted Century West to initiate the abatement of the migrating oil seep.
- On December 25, 1992, approximately 10 gallons of a mixture of weathered light fuel and lube oils seeped into the Willamette River from soil at the east end of Berth 411. Floating booms were placed to contain further discharge.^x
- On February 27, 1993, diesel was spilled while transferring material to the M/V MAY STAR at Berth 411; quantity not reported, spill reportedly contained on vessel.
- On April 16, 1993, oil was observed on the water in Slip 3. The oil was being discharged with the treated water from the oil/water separator. Foss Environmental Services responded to clean up the oil in the boom area.^{xi}
- On August 27, 1993, an oil spill at Berth 410 at the stern of the vessel ANGEL HONESTY was observed. The Coast Guard was notified. The oil reportedly dissipated quickly.^{xii}
- On March 27, 1996, a release of oil occurred during fuel transfer to the M/V ANSAC ASIA when a tank was overfilled at Berth 411; approximately 1 gallon of 2-D fuel oil released to Willamette River; Riedel used sorbents to recover the material.

^x POPGPA00135785 pg 1 (pg 1 in 3/23 brief case)

^{xi} POPGPA00135920 pg 5

^{xii} POPGPA00171800, pg 2 (pg 4 in brief case)

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- On May 13, 1996, a thin sheen was observed in the river near Berth 411 by Port and Hall-Buck employees. It appeared that the source was from one of two operations: a broken-down crane the Port had on the dock may have leaked oil during servicing, or the source was Hall-Buck. Both the DEQ and the U.S. Coast Guard were notified.^{xiii}
- On March 10, 1997, rain washed oil off of the deck of the vessel M/V SEMENA; quantity not reported; cleanup undertaken and scuppers on vessel plugged. Specific location at Terminal 4 not reported.
- On May 20, 1997, approximately 1 teaspoon of 2-D fuel oil released during fuel transfer operations caused by a valve left open; vessel reported as M/V SEASWAN at Berth 411; absorbents used for cleanup of the spill.
- On May 28, 1997, an approximately 25' X 25' sheen was discovered around and emanating from vessel M/V MARITIME FAITH at Berth 411; cause unknown; quantity not reported.
- On June 18, 1997, approximately 200-1,000 pounds of pencil pitch entered Slip 3 after an operator error on the Dravo.^{xiv}
- In a 2004 settlement, KMBT agreed to pay \$75,000 to reduce dust by re-engineering the spout that drops the soda ash into ships, post permits, fix leaking railcars and clean up spills.
- Standard Air Contaminant Discharge Permit annual reports were made available to the Port for 1995 through 2004. A review of these documents shows no excess emissions with the exception of one event in 2004. Equipment upset conditions were reported in 1996 (2), 1997 (4), and 1998 (1). Fugitive dust complaints were received in 2001 (2), 2002 (2), 2003 (2), and 2004 (2).
- NPDES Permit monthly Discharge Monitoring Reports were made available to the Port for January 2002 through December 2004. One exceedance for oil and grease was reported for April 2004.

4.3 SUMMARY OF HISTORICAL FINDINGS

A review of historical Sanborn Fire Insurance maps provided by Environmental Data Resources, Inc. (Appendix G), aerial photographs provided by the University of Oregon Map Library (Appendix H), city directories, historical topographical maps, and information provided by the Port in documents or through interviews; indicate that the subject site's development was

^{xiii} POPGPA00202736 (pg 1 in 3/23 brief case)

^{xiv} POPGPA00209397 pg 2 (pg 6 in brief case)

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initiated in the early 1900s with Union Pacific constructing storage tanks and a pipeline to a terminal dock at what is now the uplands east and south of Slip 3, outside the KMBT leasehold.

The City of Portland acquired approximately 154 acres for development and began dredging and filling the property starting in 1917. Over the course of the next 40 years, Terminal 4 began to take shape as a progressive location for industry growth. Modern development of Slip 3 and Pier 4 began in the mid-1950s.

Several RECs were identified based upon the review of available historical information. These included:

- The transfer of lead and zinc concentrates between vessel and shore at Terminal 4, relocated to Pier 5 at Slip 3 (Berths 412 and 413) in 1961.
- Pencil pitch handling between vessel and shore from 1978 to 1998. Numerous releases of pencil pitch occurred at the Slip 3 Facility and pencil pitch is an identified contaminant source in the upland soils and in-water sediments of Slip 3.

These issues are being addressed by the CERCLA removal action being undertaken by the Port under EPA and DEQ supervision under an EPA settlement agreement.

5.0 SITE RECONNAISSANCE

Mr. Matthew Mudge and Mr. Mike Edwards of URS conducted a reconnaissance of interior and exterior areas of the subject site on June 16, 2004. Mr. Brad Clinefelter, the Terminal Manager, and Mr. Marco Ullmer, both of KMBT, escorted the URS personnel throughout the site reconnaissance. Mr. Phil Ralston of the Port, accompanied URS and KMBT personnel during the site reconnaissance. Ms. Jennifer Renninger of URS conducted a brief reconnaissance of the site (exterior only) on October 18, 2007 and February 22, 2008. Photographs taken during the site reconnaissance are referenced in the following text and presented in Appendix I. URS' observations and findings are summarized below.

5.1 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

Hazardous substances and petroleum products are stored in the maintenance building at the subject site.

A storage area for gear oil, lubricating oil, and hydraulic oil drums was observed in the southeast corner of the maintenance building. Some of these drums were located within secondary containment structures (Photo 1), and the remaining containers were located on the maintenance building's concrete floor (Photo 2). Most of the drums were 55-gallon steel or poly drums. Minor staining was observed on the concrete floor under several drums.

Two steel cabinets located in the southern central portion of the maintenance building were used to store chemicals (Photo 3). These include degreasers, acetone, paint thinner, paint spray cans, and parts cleaners. Typical container size was less than one gallon. No spills, leaks, or stains were observed.

A parts-washer was also located in the southern central portion of the maintenance building (Photos 4 & 5). The parts washer consists of a drum with washtub attached to the top where the solvent is used, then drained back into the drum for reuse. No spills, leaks, or stains were observed.

Hydraulic machinery was observed at several locations around the facility, mainly associated with the pit/rail dump building.

The hydraulic machinery located along the south wall of the pit/rail dump building had minor staining on its concrete pad and absorbent pads were placed under the machinery (Photo 6).

The hydraulic machinery west of the pit/rail dump building associated with moving railcars also had minor staining on its concrete pad and absorbent pads were placed under and around the machinery (Photo 7).

In 2004, KMBT owned and maintained two forklifts, one front-end loader, and one vacuum truck. KMBT also leased a locomotive to collect railcars from the inbound tracks and move

them through the dumper. According to the Port, some maintenance of the locomotive occurred on site. Routine maintenance of vehicles operated by KMBT was typically performed inside the vehicle maintenance building. In addition to the chemicals described above, vehicle and equipment parts were also stored in the maintenance building. According to Mr. Clinefelter, KMBT contracted with a licensed contractor who regularly collects and disposes of, or recycles waste materials from the subject site.

5.2 ABOVEGROUND STORAGE TANKS

Several aboveground storage tanks (ASTs) are located at the site.

During the site reconnaissance; a 500-gallon capacity steel used oil AST was located in the southeast corner of the maintenance building (Photo 8). This AST did not have secondary containment. Minor staining was observed on the concrete floor under this AST. The tank has since been removed by KMBT.

An approximate 500-gallon capacity double-walled steel gasoline AST is located outside along the east wall of the maintenance shop (Photo 9). This AST is located in a fenced and secured area. No spills, leaks, or stains were observed.

An approximate 330-gallon capacity poly tote of sulfuric acid, used for pH adjustment, is located outside along the south central wall of the maintenance building (Photo 10). The tote is situated on a raised secondary containment platform and is located in a fenced and secured area. According to KMBT, the sulfuric acid is used in connection with the wastewater treatment system. No spills, leaks, or stains were observed.

Two steel ASTs of unknown size are also located on the subject site. Both are related to KMBT's wastewater treatment system. One AST is located inside the maintenance building (Photo 11), and one is located outside at the southeast corner of the maintenance building (Photo 12). Neither AST has secondary containment. No spills, leaks, or stains were observed.

5.3 UNDERGROUND STORAGE TANKS

One underground storage tank (UST) and associated pump island was observed on the subject site.

A 5,000-gallon double-walled fiberglass diesel UST is located at the northwest corner of the pit/rail dump building and is used primarily to fuel locomotives (Photo 13). This UST is equipped with interstitial leak detection equipment and is registered with DEQ (UST File Number 9786).

A document prepared for the Port by Century West Engineering Corporation in 1995 titled "Tank Management Manual-Marine Terminal 4" references a 10,000-gallon UST located near the pit/rail dump building (Appendix B). The document states that it was probably decommissioned by removal, but there is no documentation stating what type of UST it was,

whether the tank was removed, or whether confirmation sampling was conducted. Hall-Buck indicated that the UST was replaced by their current UST T4-43.

Although details on the UST removal were not available, T4-24 was evaluated during the RI for Slip 1 (AOC 54). Two soil borings (SB-51 and SB-52) were installed adjacent to the former UST. TPH was not detected above MRLs in the 11 and 12 foot samples from SB-51 and SB-52, respectively. VOCs were not detected in soil above the MRL with the exception of acetone, which was low and below the screening criteria. TPH, PCBs, and VOCs were not detected in grab groundwater above the MRLs with the exception of toluene detected in SB-51 at a concentration below the preliminary screening levels. Up to seven PAHs were detected in grab groundwater at low concentrations that slightly exceeded the preliminary screening levels. The concentration of several metals in grab groundwater (total and dissolved) exceeded the aquatic SLVs. None of these compounds exceeded the preliminary screening levels for groundwater from well MW-16.

During the February 2008 site visit, a vent pipe was observed on the outside and northern wall of the main building. A subsequent review by the Port of available drawings confirmed the potential presence of a tank in this location. The drawings date from 1959 and were related to the design of the "Main Dock Service Building". Specifically, the drawings indicate a 675-gallon heating oil tank was to be installed approximately five feet north of the center of the building. It is unclear whether the tank was a UST or AST. Preliminary in nature, these drawings do not appear to be as-builts, and it is unclear whether the facility was constructed consistent with the design plans.

No leaks were reported by KMBT, or on the DEQ LUST database relating to these USTs.

5.4 DRUMS AND CONTAINERS

At the time of the site visit, drums containing petroleum products were located in the maintenance building. Some drums stored inside the maintenance building did not have secondary containment. There are no floor drains inside the maintenance building. Drums observed at the subject site appeared to be properly labeled. No spills, leaks, or stains were observed.

5.5 SOLID WASTE

Solid wastes consisting of paper trash, cardboard, and other wastes are placed in dumpsters. Waste Management, Inc. removes the solid waste for disposal at the local landfill.

5.6 WASTEWATER AND SEPTIC SYSTEMS

No septic systems are reported to be in use on the subject site. Sanitary wastewater is discharged to the City of Portland's sanitary sewer system.

Since 2002, KMBT has maintained an individual National Pollution Discharge Elimination System (NPDES) permit for stormwater discharges to the Willamette River at Wheeler Bay (Photo 14).

KMBT has a wastewater treatment system that discharges treated wastewater to the sanitary sewer under a Publicly Owned Treatment Works (POTW) permit. The permit requires pH monitoring and periodic sampling. Soda ash handling associated with KMBT's facility operations result in small amounts of soda ash mixing with storm water runoff and altering the pH. KMBT has installed a wastewater treatment system that diverts soda ash-containing storm water run-off from the dock to a concrete retention basin at the southeast corner of the site (Photo 15). Water is pumped from the retention basin to the maintenance building oil/water separator and then neutralized with sulfuric acid and discharged to the sanitary sewer system. The system utilizes two large steel ASTs mentioned in Section 3.2. KMBT has modified storm water catch basins around the site to include valves and sumps (Photo 16) to divert water to the concrete retention basin for treatment. The modified catch basins also collect water generated during periodic wash-downs of machinery and equipment.

5.7 DRAINS, SUMPS, OR CLARIFIERS

One floor drain was observed inside the maintenance building near the wastewater treatment discharge point, but it had been plugged with concrete (Photo 17). It was unclear whether it discharged directly to the sanitary sewer system, but given the proximity to the wastewater system discharge point, it was most likely plugged when the wastewater system was installed.

One sump was located in the middle of the maintenance building. KMBT pumps standing water, when it accumulates, to the concrete retention basin for treatment.

5.8 PITS, PONDS, OR LAGOONS

One 43,000-gallon concrete retention basin is located at the southeast corner of the site (Photo 15). KMBT diverts storm water run-off and equipment wash-down water to the retention basin for treatment as described in Section 5.6.

5.9 POLYCHLORINATED BIPHENYL (PCB) CONTAINING EQUIPMENT AND ELECTRICAL TRANSFORMERS

The only use of PCBs known to the Port at Terminal 4, was in electrical equipment or fluorescent light ballasts that normally contained PCB oil at that time of use, and as an ingredient for exterior paint on the former Cargill grain tanks at Pier 1. Between 1988 and 1998, PCB-containing electrical equipment at Terminal 4 was replaced and, according to the Port, no PCB-containing equipment remains at Terminal 4. The following lists the equipment, date of removal of PCB-containing transformers from Terminal 4, Pier 4:

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Site Reconnaissance

- M-287005 (Serial #C862333) 225 KVA in Crane 357 (Dravo) – Removed by Reidel Environmental Services in August 1988
- M-287018 (Serial #C862942) 500 KVA at Pier 4 – Removed in May 1988 and disposed in March 1990
- M-287019 (Serial #C862941) 1725 KVA at Pier 4 – Removed in June 1989 and disposed in March 1990

URS made the following observations during the site inspection:

- Two PGE-owned pad-mounted transformers were observed near the pit/rail dump building. Both had stickers stating “less than 1 ppm”. Transformers containing less than 5 ppm are classified as “non-PCB” transformers.
- A pad-mounted transformer casing was observed on the east portion of the Port bone yard. No PCB information was available.

No visual evidence of leaks, damage or corrosion was noted on the outside of the transformers observed. If there was a release of a hazardous substance from the transformers, the owner of the transformers, PGE, would be responsible for the remediation of any environmental impacts.

5.10 WELLS

Four groundwater monitoring wells installed as part of the RI were observed on the subject site.

5.11 DISCOLORED/STAINED PAVEMENT OR SOIL, STRESSED VEGETATION, ODORS, TOPOGRAPHIC ANOMALIES

Stained areas at the site were noted on the concrete floor in the storage area for gear oil, lubricating oil, and hydraulic oil drums in the southeast corner of the maintenance building. In the same area was an approximate 500-gallon steel used oil AST with minor staining on the concrete floor. This tank has since been removed.

The hydraulic machinery associated with the pit/rail dump building also had staining on the concrete.

5.12 ADDITIONAL ISSUES

During the reconnaissance of the former scrap metal storage area (bone yard), a slag-like material was noted on the ground surface along the southern portion of the site (Photo 18).

6.0 GOVERNMENT AGENCY INFORMATION**6.1 DATABASE SEARCH**

URS reviewed information gathered from several environmental databases compiled by Environmental Data Resource, Inc. (EDR) in order to evaluate, to the extent possible, whether activities on or near the subject site have the potential to create adverse environmental impacts on the subject site. EDR reviews databases compiled by federal, state, and local government agencies. The complete list of databases searched by EDR is provided in Appendices J and K.

It should be noted that this information is reported as URS received it from EDR, which in turn reports information as it is provided in various government databases. It is not possible for either URS or EDR to verify the accuracy or completeness of information contained in these databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence. A description of the databases searched and the information obtained is described below and summarized in Table 2.

**Table 2
Environmental Database Summary
Kinder Morgan Bulk Terminal Leasehold
Port of Portland Marine Terminal 4
Portland, Oregon**

Type of Database	Description of Database/Effective Date	Radius Searched	Number of Sites Identified
NPL	The National Priorities List identifies uncontrolled or abandoned hazardous waste sites. To appear on the NPL, sites must have met or surpassed a predetermined hazard ranking system score, been chosen as a state's top priority site, pose a significant health or environmental threat, or be a site where the EPA has determined that remedial action is more cost-effective than removal action.	1 mile	1
CORRACTS	Listing of RCRA facilities that are undergoing corrective action. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.	1 mile	1

Table 2
Environmental Database Summary
Kinder Morgan Bulk Terminal Leasehold
Port of Portland Marine Terminal 4
Portland, Oregon

Type of Database	Description of Database/Effective Date	Radius Searched	Number of Sites Identified
CERCLIS	The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database identifies hazardous waste sites that require investigation and possible remedial action to mitigate potential negative impacts on human health or the environment.	0.5 mile	0
RCRA TSD	Resource Conservation & Recovery Act treatment, storage, or disposal (TSD) sites.	0.5 mile	0
RCRA Generators	RCRA-regulated hazardous waste generator notifiers list; both Large Quantity Generators (LQG) and Small Quantity Generators (SQG) are included in this list.	0.25	SQG – 0 LQG – 0
ERNS and state spills list	EPA's Emergency Response Notification System (ERNS) list contains reported spill records of oil and hazardous substances.	Subject property	Subject property
SWLF	State inventory of solid waste disposal and landfill sites.	0.5 mile	0
LUST	List of information pertaining to all reported leaking underground storage tanks.	0.5 mile	5
SHWS	State Hazardous Waste Site (SHWS) listing of information about sites that may be of environmental interest – the State of Oregon equivalent is the Oregon DEQ's Environmental Cleanup Site Information (ECSI) database.	1.0 mile	Subject Property + 26
UST/AST	State registered underground and aboveground storage tank sites listing.	0.25 mile	Subject Property

6.1.1 Subject Property Listings

The subject property was identified by EDR as being listed on four regulatory agency databases:

SHWS – Port of Portland – Terminal 4 is listed on the Environmental Cleanup Site Information (ESCI) System database as a site with historic contamination with several cleanup efforts. The ESCI number for the site is 272 and includes discussion of the KMBT leasehold. A detailed report from DEQ's ESCI database is included in Appendix I. The ESCI report references information relating to the subject site and nearby facilities and does not discuss issues pertaining to the KMBT leasehold, exclusively. The summary below references issues pertaining to the KMBT site only:

Available Port records indicate that pencil pitch was handled at Terminal 4 from 1978 to 1998. Jones Oregon Stevedoring held agreements with the Port to unload pencil pitch at Berths 410 and 411. ^{xv} Jones had the Bulk Cargo Handling pencil pitch contract from July 1, 1980 through June 30, 1981. ^{xvi}, ^{xvii} Jones also had the pencil pitch unloading contract for July 1, 1982 to June 30, 1983. Stevedoring Services of America was the stevedore for 8 pencil pitch vessel unloadings between September 1985 and December 10, 1987. Hall-Buck handled pencil pitch at Berth 411 in Slip 3 from 1988 to 1998. Longshoremen removed the pencil pitch from the ships' holds by means of a clamshell-equipped Dravo unloading tower on Pier 4 and loaded it directly onto truck trailers or railcars adjacent to the pier. Sediment sampling conducted in Slip 3 by Battelle Marine Sciences in December 1988 showed elevated concentrations of PAHs, which were attributed to pencil pitch spills. The sediments in Slip 3 were dredged in December 1994 and January 1995, and confirmatory sediment sampling verified that pencil pitch concentrations were below the maximum allowable concentration of 0.5 percent. Hall-Buck notified the Port in June 1997 of an additional pencil pitch spill in Berth 411, and suction dredging was used in July 1997 to remove the pencil pitch from the submerged riprap area at the southern face of Berth 411. Confirmation sampling showed that the dredging technique was inefficient in cleaning the area outside the riprap, and bucket dredging was utilized in 1998 to complete the cleanup.

Extensive pencil pitch source control work has been conducted since 2004. A Pencil Pitch Investigation Report was submitted to DEQ in 2006 and Phase II Pencil Pitch Investigation Report was submitted in 2007. From these investigations it was determined that PAHs are present in surface soil on the south slip bank area at concentrations that exceed human health RBCs and/or sediment PECs. A Phase I Removal Action was completed from August to October 2008 at Terminal 4 that included the dredging of 12,819 cubic yards of contaminated sediment from slip 3 and the area north of Berth 414, the installation of a near-shore cap to isolate petroleum contaminated sediment, and the capping and stabilization of the banks of Wheeler Bay to isolate contaminants from migrating to the river.

^{xv} 491820 Jones Pitch Handling Agmt (9-26-79), pg 1

^{xvi} POPGPA00103985

^{xvii} POPGPA00103986-87

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Currently, a Source Control Measure Alternative Evaluation is being prepared to assess the appropriate source control measure (SCM) to mitigate the potential for the soil to erode into the river. In addition, a Contamination Media Management Plan (CMMP) is in preparation to identify and document the appropriate actions to limit human exposure to this soil.

OR CRL – Port of Portland – Terminal 4 is listed on the Confirmed Release List and Inventory database as having historical spills that has required cleanup. KMBT is referenced in the DEQ ESCI file number 272.

ERNS – Port of Portland – Terminal 4 is listed on the Emergency Response Notification System database which records releases of oil and hazardous substances. KMBT is referenced in the DEQ ESCI file number 272.

UST – Port of Portland – Terminal 4 is listed on the Underground Storage Tank database as having three permitted USTs. The subject site, KMBT, has one permitted UST under DEQ permit number 9786. Information regarding this tank is provided in Section 5.3.

The subject site was also identified by EDR as being listed on several other regulatory agency databases that are classified as supplemental to the ASTM standard.

6.1.2 Off-site Property Listings

The EDR database report identifies off-site facilities that have suspected or documented environmental concerns or Recognized Environmental Conditions that may negatively impact the subject site. The criteria for further evaluating the potential impact of a listed off-site facility are summarized below:

- The listed off-site facility is adjoining to the subject site; or, the listed off-site facility is documented or assumed to be hydrogeologically upgradient and a likely pathway exists for environmentally mobile contaminants to reach the subject site; or, contaminants from the listed off-site facility can reach the subject through other pathways (i.e., surface runoff); and,
- The off-site facility is listed on one of the databases of the Federal NPL, Federal CORRACTS, Federal CERCLIS, Federal ERNS, State LUST, State Deed Restrictions, and State Toxic Pits, Landfill (excluding transfer stations) and is not listed in the database as “closed” or “no further action” (including NFRAP); or,
- The facility adjoins the subject site and is listed as a RCRA large-quantity hazardous waste generator, a CERCLIS NFRAP site, or an UST operator; or
- The facility is a known or suspected concern based on professional judgment or observations made during the site reconnaissance (i.e., dry-cleaning operations that may or may not be listed as RCRA-SQG or a non-adjoining UST site that appears to have a remediation system in-place).

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Summarized below are identified facilities that, using the criteria discussed above, appeared to be of potential concern including EDR's map reference number, site name and address, direction and distance from subject site, type, and an evaluation of the listed site's potential to create a Recognized Environmental Condition on or otherwise impact the subject site.

Of the 26 listed SHWS sites, 9 were eliminated as potential concern because they were on the West side of the Willamette River. Sites that are adjacent, or assumed to be hydrogeologically upgradient are listed and discussed below:

Site: UPRR – St. Johns Tank Farm; DEQ VCP Site #2017
EDR #: A2
Databases: SHWS, OR VCS, LUST
Address: 6908 N Roberts Avenue
Location: Approximately ¼ to ½ mile east-northeast of the subject site.
Concern: Impacts to soil and surface water from oil and other fuel related compounds.
Status: DEQ issued a conditional No Further Action for this property in September 2004. LUST site closed on August 29, 2001.

Site: Crown Cork & Seal Co Plant 87
EDR #: 14
Databases: FINDS, RCRIS-LQG, TRIS, CORRACTS
Address: 10200 N Lombard Street
Location: Approximately ½ to 1 mile east of the subject site.
Concern: The operator has been cited for 17 RCRA violations.
Status: The facility has been assigned a low corrective action priority by the EPA.

Site: Flint Ink Corp.
EDR #: 7
Databases: SHWS, OR HAZMAT
Address: 10653 N Lombard Street
Location: Approximately ½ to 1 mile east of the subject site.
Concern: Petroleum-based black ink has impacted soils. A cleanup has been conducted but moderate levels of hydrocarbons and low levels of copper, chromium, and zinc remain in shallow soils in some areas.
Status: Remedial investigation activities are ongoing.

Site: Port of Portland – Terminal 4, Toyota Auto Storage
EDR #: C8 & 9
Databases: SHWS, LUST, OR CLR
Address: 10400 N Lombard Street
Location: Approximately ½ to 1 mile east of the subject site.
Concern: Several UST leaks from tanks of van fuel (similar to kerosene), and gasoline to subsurface soils.

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Status: DEQ issued a No Further Action letter on 6/11/04 for the ESCI site. DEQ issued a No Further Action letter for the LUST site on June 11, 1988.

Site: Klix Corporation

EDR #: D10

Databases: SHWS, LUST, OR CLR, OR VCS, AUL

Address: 10771 N Lombard Street

Location: Approximately ½ to 1 mile northeast of the subject site.

Concern: Improperly stored drums of hazardous material, a tank of isopropyl alcohol, and disposal of waste to the sanitary sewer impacted soils at the site.

Status: DEQ issued a No Further Action letter for the tank on 1/16/90. DEQ staff determined on 6/11/96 that No Further Action was required for the site under an industrial cleanup scenario. The NFA is contingent upon use of the site remaining industrial.

Site: Chemcentral Portland

EDR #: D11

Databases: RCRIS-SQG, SHWS, FINDS, HSIS, LUST, OR SPILLS, OR CRL, UST, AST CERC-NFRAP, OR VCS

Address: 10821 N Lombard Street

Location: Approximately ½ to 1 mile northeast of the subject site.

Concern: The site stores solvents in approximately 40 USTs and blends the materials to customer specifications. Soil and groundwater sampling revealed chlorinated and aromatic solvents in groundwater at the site.

Status: The site is upgrading its UST network with ASTs and containment bulkheads. Investigations of soil and groundwater are ongoing. Solvents were intermittently detected at low concentrations in a well on Port Property near Lombard.

Site: Borden Inc.

EDR #: 12

Databases: SHWS, CERC-NFRAP

Address: 10915 N Lombard Street

Location: Approximately ½ to 1 mile northeast of the subject site.

Concern: Glue and resin manufacturing is conducted at the site, groundwater from an on-site monitoring well has shown significant impacts of chlorinated and alcohol-based solvents. Little else is known about the site.

Status: The EPA has recommended a medium priority expanded PA (XPA) due to the surrounding area being predominantly industrial and the low risk of groundwater being used.

Site: Boydston Metal Works, Inc.

EDR #: 16

Databases: RCRIS-SQG, SHWS, FINDS, HSIS, AST, AST, FTTS INSP, OR VCS

Address: 9002 N Sever Court

Location: Approximately ½ to 1 mile north-northeast of the subject site.

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Concern: River sediments adjacent to the site contain total organotins, copper, zinc, and antimony. On-site groundwater is contaminated with chlorinated solvents, and soil contains metals, PCBs, and petroleum compounds.

Status: Remedial investigation is ongoing.

Site: Union Carbide Corporation

EDR #: F20

Databases: SHWS, OR CRL

Address: 11920 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Two former scrubber sludge disposal ponds were located at the site with substantial contaminant concentrations, which may be leaching to groundwater. The southern pond also had an outflow to the Columbia Slough where sediments were believed to be impacted. Both ponds were filled by 1987 or 1988. Subsurface petroleum contamination associated with former USTs and ASTs is present on the western parcels. There is surface soil contamination (petroleum and metals) in and near the former processing building, paint storage shed, and palletized waste drums. PCB-contaminated soil and concrete is present at the electrical substation, and a lead-contaminated ash pile is located along the eastern site boundary.

Status: A remedial investigation is ongoing for on-site impacts, DEQ concluded in August 2002, there is no basis for a slough sediment removal action or further investigation at this time.

Site: NW Pipe and Casing Company

EDR #: F21

Databases: SHWS, FINDS

Address: 12005 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Petroleum, chlorinated solvents, PCBs, and PAHs were found in on-site soils. A leaking underground storage tank had caused localized groundwater contamination. Shallow river sediments along the site contained concentrations of the following contaminants that exceeded Portland Harbor Sediment baseline values: antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, nickel, manganese, zinc, butylbenzophthalate and total organotins.

Status: XPA is a high priority, with the XPA report expected in December 2001. NW Pipe to install groundwater monitoring wells in area of chlorinated VOC release to groundwater.

Site: Joseph T. Ryerson & Sons, Inc.

EDR #: F22

Databases: SHWS, FINDS

Address: 9040 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: No information available.

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Status: Preliminary Assessment recommended.

Site: Premier Edible Oils

EDR #: 23

Databases: SHWS, OR CRL, OR VCS

Address: 10400 N Burgard Street

Location: Approximately ½ to 1 mile north of the subject site.

Concern: Groundwater contamination present at this site. Primary contaminants include petroleum hydrocarbons (particularly BTEX and other petroleum-based VOCs). Several well points also contained low levels of chlorinated solvents. Sediments adjacent to the site are impacted by mercury, cobalt, antimony, barium, PAHs, zinc, copper, manganese, arsenic, carbazole, dibenzofuran, methylnaphthalene, and bis(2-ethylhexyl)phthalate. Free-phase petroleum is present on groundwater at the southwest corner of the site and appears to be from historic site operations. Low-level chlorinated solvents, PAHs, and VOCs usually associated with gasoline were detected with the free-phase petroleum.

Status: Groundwater remedial investigation and risk assessment are ongoing.

Site: Jefferson Smurfit

EDR #: 24

Databases: SHWS, OR VCS

Address: 9930 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Sediments adjacent to the site contained zinc and total organotins at concentrations more than 50 percent above baseline values.

Status: EPA agreed with DEQ recommendation for no further upland investigation and low environmental priority ranking based on XPA information.

Site: Portland Container Repair Corporation

EDR #: 25

Databases: SHWS, FINDS

Address: 9449 N Burgard Way

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Sediments adjacent to the site contained total organotins, copper, zinc, and antimony.

Status: Remedial investigation is ongoing.

Site: Rivergate Auto Wrecking – U Pull It Division

EDR #: G29

Databases: SHWS, FINDS

Address: 12104 N Columbia Boulevard

Location: Approximately ½ to 1 mile northeast of the subject site.

Concern: Impacts to soil include: used motor oil and antifreeze, likely gasoline/BTEX and PAHs, possible lead, PCBs, cadmium, chromium, zinc, asbestos, mercury, freon, phthalates, and other auto-associated wastes. EPA SI (June 1999) detected PAHs,

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metals, BTEX, phthalates, ethylene glycol, pesticides, and PCBs. Groundwater may be very shallow at site with possible groundwater contamination.

Status: No Further Remedial Action Planned under EPA.

Site: Pacific Car Crushing
EDR #: G31 & 32
Databases: SHWS, OR HAZMAT, OR CRL
Address: 12122 N Columbia Boulevard
Location: Approximately ½ to 1 mile northeast of the subject site.
Concern: Soils around storm water holding pond saturated with waste oil. Contaminants presumably include automotive-associated hazardous substances (gasoline/BTEX, lead, cadmium, chromium, mercury, PCBs, PAHs, Freon, brake fluid, antifreeze, zinc, copper, asbestos, nickel, phthalates, etc).

Status: Remedial investigation is ongoing.

Site: BPA – St. Johns Substation
EDR #: H33
Databases: SHWS, FINDS
Address: 12567 N Columbia Boulevard
Location: Approximately ½ to 1 mile northeast of the subject site.
Concern: BPA approached DEQ in April 1996 with information about low to moderate levels of several chlorinated solvents in an on-site well that at one time supplied drinking water to employees. The source of the TCA, DCE, and DCA is likely to be past use of chlorinated solvents to clean electrical equipment over bare ground. Additionally, historic spills and releases of dielectric fluids caused significant concentrations of PCBs in shallow soil in many locations of the site.

Status: BPA excavated 342 tons of PCB-contaminated soil, but an evaluation of PCB levels remaining in soils still needs to be conducted as well as on-site characterization of VOCs in groundwater. Further state action at the site is a medium priority.

Site: Mt. Hood Metals, Inc.
EDR #: I35
Databases: SHWS, OR VCS
Address: 9645 N Columbia Boulevard
Location: Approximately ½ to 1 mile east-northeast of the subject site.
Status: *See Union Carbide Corporation; Mt. Hood Metals facility was built on one of the sludge ponds associated with Union Carbide Corporation. Remedial Investigation of the site by both Mt. Hood Metals and Union Carbide is ongoing.

6.1.3 Unmapped or Orphan Sites

The review included EDR's listing of Unmapped Sites, sites that have not been geocoded based on lack of sufficient data regarding their exact location within the general area. The subject site

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was not identified as an Unmapped Site. Thirty-one unmapped sites were identified on the database summary as Unmapped or Orphan Sites; upon closer review, only four of these sites were located within the ASTM-designated radii of the subject site, and using the criteria discussed above, appeared to not be of potential concern. There is no reason to believe that these sites have created a Recognized Environmental Condition on the subject site.

6.2 REGULATORY AGENCY CONTACT

URS contacted government agencies listed below to obtain information regarding contamination, environmental permits, and corrective actions on the subject site.

Oregon Department of Environmental Quality, Northwest Regional Office – Oregon DEQ was contacted for information regarding ECSI and LUST sites at the subject and adjoining properties. Information for the ECSI and LUST sites was reviewed by querying DEQ's online database. A copy of relevant files is included in Appendix L.

Oregon State Fire Marshal –The Oregon State Fire Marshal was not contacted because KMBT provided information related to emergency responses associated with releases of hazardous substances and the storage of chemical products. A Hazardous Substance Information Survey is attached in Appendix M.

Portland Fire Marshal –The Portland Fire Marshal was contacted to obtain information related to emergency responses associated with releases of hazardous substances and the storage of chemical products. The Portland Fire Marshal responded via fax and indicated that in 1992 and 1993 the fire marshal inspected recently installed ASTs, one containing sulfuric acid, and one containing oil. The fax received from the Portland Fire Marshal is included in Appendix M.

7.0 OPINIONS AND CONCLUSIONS

7.1 ON-SITE ENVIRONMENTAL CONCLUSIONS

Recognized Environmental conditions (REC)

Based on observations made during the site reconnaissance and other available information, the following Recognized Environmental Conditions were identified:

REC #1: During the February 2008 site visit, a vent pipe was observed on the outside and northern wall of the main building. A subsequent review of Port design drawings from 1959 indicate a 675-gallon heating oil tank was planned for this location.

The T4S3 RI did not indicate the presence of a UST in this area. The nearest soil boring (GP-24) was completed 60 feet southwest of the tank. One soil sample was analyzed for TPH (depth of 16-20 feet) with no detectable TPH-d and 269 mg/kg TPH-o.

The T4S1 RI also did not indicate the presence of a UST in this area. The nearest soil borings were completed 50 feet west (SB-51) and 70 feet southwest (SB-52) of the tank. Soil samples from the 11- to 12-foot depth range did not contain measurable levels of TPH. Grab groundwater samples were collected from each boring and did not contain measureable levels of TPH.

The groundwater results suggest that if any releases occurred they were likely limited to the immediate vicinity of the UST. These borings, however, do not provide direct useful information about potential releases from the UST.

Recommendation: Perform a geophysical survey utilizing ground penetrating radar and magnetic survey devices to verify the possible presence of a UST or UST pit. If such a feature is confirmed then the information should be evaluated for further investigation, if any.

REC #2: The RI report was submitted prior to the completion of the stormwater evaluation. Surface water flow from precipitation and runoff on impervious surfaces is collected in drainage basins with subsequent transport to the Willamette River. Thus, potential surface water and sediment pathways exist.

Recommendation: A storm water and sediment evaluation is currently being undertaken, under DEQ oversight. The Port submitted a March 2009 report "Final – Storm Water Data summary Report, Terminal 4 Slip 1 and Slip 3 Uplands Facilities" to DEQ. Upon completion, the results of stormwater and sediment investigations should also be utilized to assist in determining site baseline conditions.

De Minimis Conditions

The following items, although not included as RECs, were identified during this Baseline Audit as *deminimis* conditions. These items, though they could potentially contribute to contamination on the subject site, are not included as RECs either because the condition is generally considered to pose a low concern, or because insufficient evidence was available to definitively conclude that the condition has resulted in the presence or likely presence of contamination to soil and/or groundwater on the subject site. This includes areas that were investigated as part of the RI and based on an evaluation of analytical test results against regulatory screening levels, DEQ concurred were adequately characterized.

De minimis Condition #1: Pencil pitch was handled at Berth 411 in Slip 3 from 1978 to 1998. Pencil pitch was removed from the ships' holds and loaded directly onto truck trailers or railcars adjacent to the pier.

In 2004 URS recommended that the Port conduct upland soil sampling at Berth 411 to assess the potential impacts from historical pencil pitch spills. This was addressed in the RI (AOC 73 – Berth 411 Pencil Pitch Handling). Surface soil samples (S-8 through S-10) were collected and analyzed for PAHs and PCBs. Additionally, groundwater from well MW-16 was analyzed for PAHs. Low concentrations of PAHs were detected in the surface soil samples. The concentration of benzo(a)pyrene (270 ug/kg) in S-10 slightly exceeded the industrial PRG (210 ug/kg). With the exception of one sampling event (May 2005) at well MW-16, PAHs were not detected above the preliminary screening levels during the quarterly sampling. This exceedance was not observed in the other quarters of monitoring and was determined to likely be related to soil entrained in the samples. PCBs were not detected above the MRLs with the exception of Aroclor 1260 in soil from MW-16. PCBs were not detected above the MRL in groundwater from well MW-16. DEQ concurred that the AOC was adequately characterized for the purposes of the RI and risk assessment.

De minimis Condition #2: The transfer of lead and zinc concentrates at Terminal 4 was relocated to Slip 3. A 2001 report prepared for the Port by URS titled "Terminal 4 – Track 401 Soil Sampling Project" indicates that historic heavy metal ore transfer activities at Terminal 4, north of the subject site along rail segment 401, likely resulted in elevated concentrations of lead in near-surface soil above hazardous waste levels. This was determined to be an Area of Concern in the "Draft Remedial Investigation Work Plan, Port of Portland, Terminal 4 Slip 1 Upland Facility".

This area was subsequently addressed in the RI as AOC 72 (Railroad Alignments). Surface soil samples collected from 0.5 and 1.5 feet bgs (AOC72-S1 through AOC72-S3) were analyzed for TPH, PAHs, and metals. In addition, the 1.5 foot samples from select samples (AOC72-S1 and AOC72-S3) were analyzed for VOCs. Soil samples from approximately 1-foot bgs from borings SB-70 through SB-76 were analyzed for TPH, VOCs, and metals. Grab groundwater from boring SB-70 was analyzed for metals.

TPH was not detected above the MRL in soil. VOCs in soil were generally not detected above

the MRL with the exception of methylene chloride which was below the preliminary screening levels in SB-70 and SB-71. A few PAHs were detected above the MRL in soil from AOC72-S1 at low concentrations that were all below the preliminary screening levels. The concentrations of up to three metals in soil from SB-72, SB-75, and SB-76 exceeded the preliminary screening levels. The concentrations of metals in grab groundwater were low and consistent with the expected background values. DEQ concurred that the AOC was adequately characterized for the purposes of the RI and risk assessment.

De minimis Condition #3: A 1985 Port of Portland Map entitled "Electrical Transformer Locations" depicts a 95-gallon PCB containing oil reservoir associated with the Port's Crane 4357 at Slip 3 Berth 411.

According to Port records, Crane 4357 is the Dravo The 225 KVA transformer M-287005 (Serial #C862333) in Crane 4357 was removed by Reidel Environmental Services in August 1988.

De minimis Condition #4:

A storage area for gear oil, lubricating oil, and hydraulic oil drums was observed in the southeast corner of the maintenance building. A portion of these drums were placed within secondary containment structures, the rest were placed on the maintenance building's concrete floor. Most of the drums were 55-gallon steel or poly drums. Also located in this area was an approximate 500-gallon steel used oil AST. This AST does not have secondary containment. Minor staining was observed on the concrete floor under several drums and the AST.

Recommendation: KMBT to provide secondary containment for all containers of materials.

De minimis Condition #5:

Stationary hydraulic machinery was observed at several locations on site, mainly associated with the pit/rail dump building. Minor staining of concrete ground surfaces was observed as well as absorbent pads that have been placed under and around the machinery. No containment was observed with the machinery.

Recommendation: KMBT to evaluate and maintain machinery on a routine basis to avoid leaks or spills of materials.

7.2 OFF-SITE ENVIRONMENTAL CONCLUSIONS

Recognized Environmental conditions (REC)

REC #3: During the reconnaissance of an area northwest of the subject site that was formerly used by the Port for storing scrap metal, a slag-like material was noted on the ground surface along the southern portion of the property.

Recommendation: Analyze soils below the slag-like material for metals if necessary (i.e. for change in site development) to evaluate the potential for leaching of heavy metals to soils and/or groundwater.

REC # 4: The leasehold is adjacent to and in the vicinity of the Portland Harbor Superfund Site. In or over water releases of hazardous substances, petroleum products and other pollutants are being investigated through an EPA Region 10 supervised RIFS process.

Historical Recognized Environmental conditions (HREC)

HREC #1: The upland soils of the Slipbank area (directly adjacent to the southeast corner of the KMBT leasehold boundary) were investigated in 2006 and 2007 in order to determine if PAHs were present in erodible soils; and to characterize the lateral and vertical extent of the contamination. Sampling identified soils with PAHs concentrations above RBCs and PECs primarily in soils at two feet below ground surface. Ash Creek recommended removal of the contaminated soils, replacing with clean fill and riprap as well as capping with asphalt pavement in the Slipbank area.

Consistent with Ash Creek recommendations of the Phase II Pencil Pitch investigation, removal of contaminated soils and replacement with clean fill along the bank area and pave the upland areas was completed in 2008.

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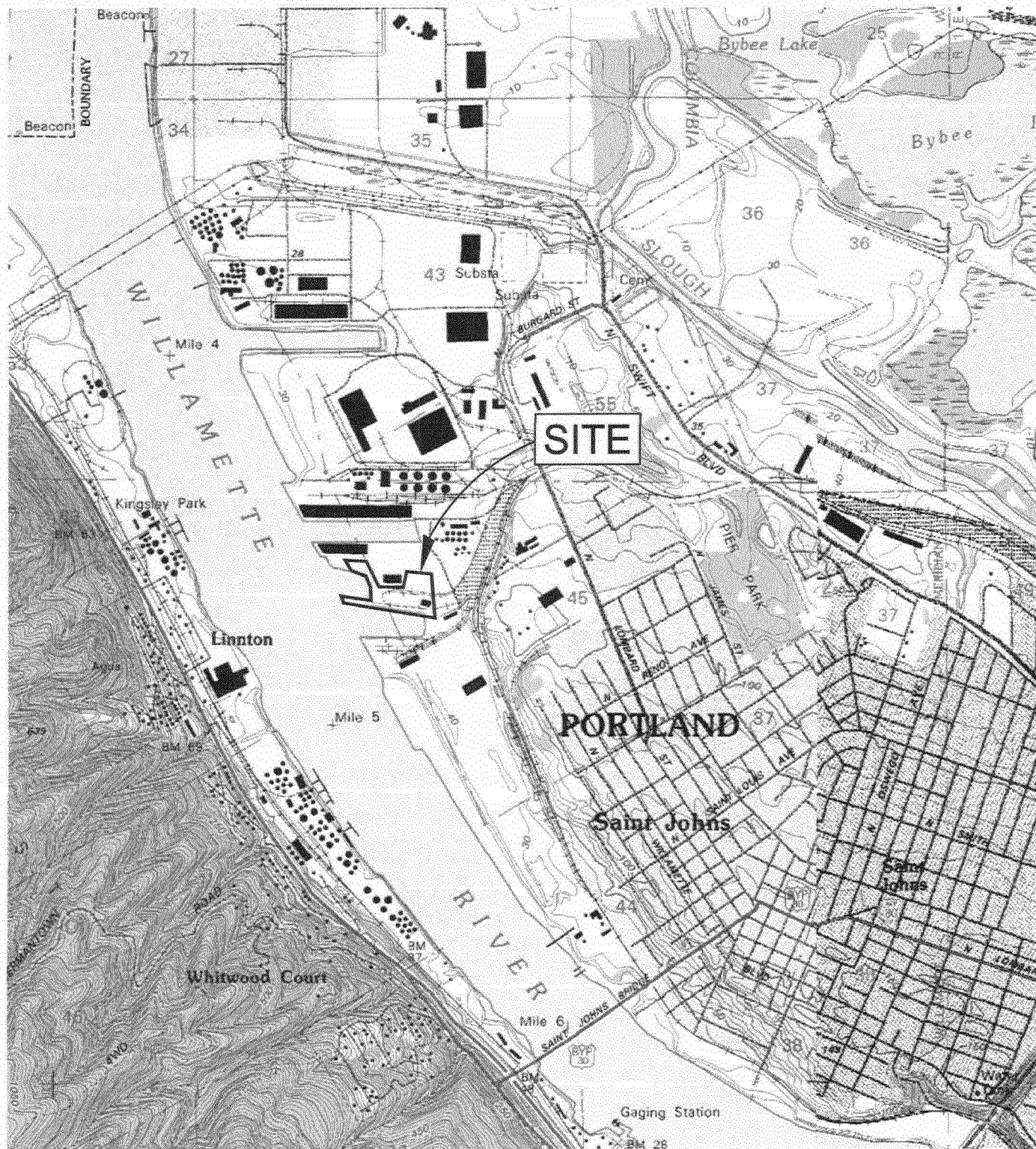
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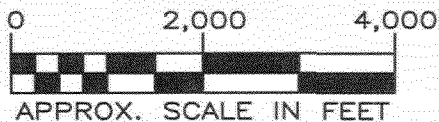
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Ms. Jennifer Fonseca-Littrell, *Port Property Management Administrator*, (503)-240-2013, December 3, 2007.

FIGURES



SOURCE: PORTLAND, OREGON USGS 7.5 MINUTE QUADRANGLE, 1990
 LINNTON, OREGON USGS 7.5 MINUTE QUADRANGLE, 1990.



URS

MARCH 2008
 25696598

VICINITY MAP
 KINDER MORGAN
 BULK TERMINAL LEASEHOLD
 MARINE TERMINAL 4
 PORTLAND, OREGON

FIGURE 1



December 29, 2009

Mr. David Breen
Port of Portland
Marine Terminal 6
7201 N. Marine Drive
Portland, Oregon 97203

**Re: Final Report – Baseline Audit
Kinder Morgan Bulk Terminal Leasehold
11040 N Lombard Street; Marine Terminal 4, Pier 4
Portland, Oregon
URS Project: 25696598**

Dear Mr. Breen:

This report presents the URS Corporation (URS) Final Baseline Audit conducted for the Kinder Morgan Bulk Terminal Leasehold located at the Port of Portland Marine Terminal 4 in Portland, Oregon. The Baseline Audit was conducted according to our September 24, 2007 proposal and was a follow-up to a Phase I Environmental Site Assessment conducted in 2004.

URS looks forward to your comments on this document. Please call Alicia Voss if you have questions or comments about this report.

Sincerely,

URS CORPORATION

Jennifer L. Renninger
Senior Environmental Scientist

Alicia Voss
Project Manager

Attachment: Final Baseline Audit Report

URS Corporation
111 SW Columbia, Suite 1500
Portland, OR 97201-5850
Tel: 503.222.7200
Fax: 503.222.4292

KMB00000462

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1.0 INTRODUCTION

1.1 OBJECTIVES AND SCOPE OF SERVICES

The objective of this Baseline Audit is to establish an environmental baseline, as it existed in 2004 to assist the Port and Kinder Morgan Bulk Terminals (KMBT) in their respective Lease obligations under KMBT's facility Lease as amended in 2004. To accomplish this, this Baseline Audit utilizes (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Standard E 1527-00) as "non-binding general guidance" in gathering reasonably available information regarding current and historical activities on or adjoining the subject property to evaluate whether known or suspect environmental concerns that would represent a "Recognized Environmental Condition" (REC) exist associated with the subject property and the adjoining properties.

The scope of service for this Baseline Audit is detailed in the proposal between the Port of Portland (Port) and URS Corporation (URS), dated June 9, 2004 and our September 24, 2007 Task Order. The Scope of Services includes a review of historical uses of the subject site, a site reconnaissance, contact with local officials and a review of available environmental databases. Consistent with the 2004 proposal, the Phase I ESA was performed and a Draft Report submitted to the Port. At that time, uplands investigations that were relevant to the subject property were ongoing. URS's work scope was modified to enable use of the uplands investigation work completed through 2007 in this environmental baseline. Consequently, URS's 2007 Scope of Services includes a review of these uplands investigations, a review and incorporation of Port comments on the 2004 Draft, and a review of lead-based paint and asbestos-containing materials sampling data. This baseline does not include the testing of soil or groundwater; or surveys or sampling for asbestos, lead paint, drinking water, or radon.

1.2 DEFINITIONS AND TERMINOLOGY

The definitions and terminology used in this report are consistent with the definitions in ASTM Standard E1527-00, the standard current in 2004, unless noted otherwise. The following ASTM terms and definitions are used throughout this report:

Recognized Environmental Condition (REC) – The presence or likely presence of any hazardous substances (as defined pursuant to CERCLA, 42 USC §9601(14), as interpreted by Environmental Protection Agency (EPA) regulations and the courts) or petroleum products (including those substances within the meaning of the petroleum exclusion to CERCLA, 42 USC §9601(14), as interpreted by EPA regulations and the courts) on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis*

conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Any issues identified by URS through its review of historical information, information provided by the Port or in the public domain, or identified during onsite reconnaissance that would meet the above definition is classified in this report as a REC. In addition, URS classifies any government or facility initiated environmental investigation as a REC until data supporting reclassification can be reviewed and evaluated or the government agency requires no further action. For example, an area that is identified as a Solid Waste Management Unit (SWMU) or is under a Resource Conservation Recovery Act (RCRA) Facility Investigation would be classified as a REC. Any cleanup that is planned or underway but incomplete either through a regulatory enforcement action, Consent Order or a Voluntary Cleanup program is classified as a REC.

URS classifies as “*de minimis*” documented or suspected contamination that does not, or is unlikely to present a health or environmental risk and would not, or would be unlikely to trigger an enforcement action based on URS’ understanding of the materials involved and its experience with local regulators at similar facilities. All *de minimis* conditions are not detailed in this report.

Offsite facilities that may impact the subject site with hazardous materials or petroleum products are not classified as creating a REC on the subject site unless, based on available information and in URS’ opinion, such impacts present a material risk of harm to the health or safety of current site occupants or the appropriate governmental agencies would initiate an independent enforcement action against the Port.

Historical Recognized Environmental Condition (HREC) – An environmental condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. The final decision rests with the environmental professional and will be influenced by the current impact of the HREC on the site. If a past release of any hazardous substances or petroleum product has occurred in connection with the site and has been remediated, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a no further action letter or equivalent), this condition shall be considered an HREC and included in the findings section.

For the purpose of this report, an apparent HREC would be classified in this report as a REC if, for example, its remediation or closure would not conform to current minimum regulatory requirements or industry standards for investigation or chemical analyses. Another example could include a site or area that has been remediated, but ongoing groundwater monitoring and reporting is required.

1.3 LIMITING CONDITIONS

URS' ability to complete the scope of services was limited by the fact that information on the subject and adjacent properties held by regulatory agencies and other relevant sources may not have been available for review, or replies from regulators and other relevant sources to URS' requests for this information were not received at the time this report was prepared.

1.4 LIMITATIONS

This Baseline Audit was prepared in accordance with the Scope of Services described in URS' proposal prepared for the Port and subsequent amendments. The work conducted by URS is limited to the services agreed to with the Port, and no other services beyond those explicitly stated should be inferred or are implied.

The conclusions presented in this report are professional opinions based solely upon indicated data described in this report, visual observations of the subject site and vicinity, and URS' interpretation of the available historical information and documents reviewed. They are intended exclusively for the purposes outlined herein and the subject site location and project indicated. URS understands that the Port is in the process of renegotiating its tenant leaseholds at its marine terminals. URS' evaluation of issues and findings reflect this assumption unless noted otherwise.

It should be recognized that this study was not intended to be a definitive investigation of contamination at the subject site and the conclusions provided are not necessarily inclusive of all the possible conditions. Given that the scope of services for this investigation was limited and that exploratory borings, soil and/or groundwater sampling or analytical testing was not undertaken, it is possible that currently unrecognized subsurface contamination may exist at the subject site. URS makes no representations regarding the value or marketability of the subject site or the suitability for any particular use, and none should be inferred based on this report.

Opinions and recommendations presented herein apply to the subject site conditions existing at the time of our investigations and cannot necessarily apply to subject site changes of which URS is not aware and has not had the opportunity to evaluate. Changes in the conditions of this property may occur with time due to natural processes or the works of man on the subject site or adjacent properties. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

URS has exercised due and customary care in the conduct of this Baseline Audit but has not independently verified information provided by others. Therefore, URS assumes no liability for any loss resulting from errors or omissions arising from the use of inaccurate/incomplete information or misrepresentations made by others.

SECTION ONE

Introduction

1.5 RELIANCE

This report shall not be relied upon by any other party without the express written authorization of URS.



2.0 SITE DESCRIPTION

2.1 LOCATION

The KMBT leasehold (subject site) is located at the Port's Marine Terminal 4 in the City of Portland, Multnomah County, Oregon. Terminal 4 is located in the NW ¼ and NE ¼ of Section 2, Township 1 North, Range 1 West of the Willamette Meridian, and is included on the Linnton, Oregon U.S. Geological Survey (USGS) 7.5-Minute Quadrangle map (USGS, 1984). The topography of the subject site is relatively flat, with an elevation of approximately 30 feet above mean sea level (msl). The ground surface consists mainly of asphalt or concrete, with areas of gravel and grass at the perimeter. No surface water bodies are located on the subject site, but it is located adjacent to the Willamette River and is downstream of the St. John's Bridge in North Portland. A Vicinity Map is included as Figure 1.

2.2 SITE FEATURES AND USE

The subject site includes Pier 4 (Berths 410 & 411) of Terminal 4, and is bounded by Slip 3 to the south, the Willamette River to the west, Wheeler Bay to the northwest, and Union Pacific Railroad (UPRR) right-of-way to the east. The approximate 6.56-acre site is leased from the Port. KMBT currently leases Pier 4 and its adjacent area for loading of soda ash onto ships at Berths 410 and 411. The facility is permitted as an export facility for multiple bulk commodities. Material is transferred from rail to ship; or rail to storage to ship. The leasehold includes railroad tracks, a conveyor system with associated buildings, a 30,000 metric ton storage building, and a maintenance warehouse with offices. A Site Plan that indicates major site features is presented as Figure 2.

Additional agreements within KMBT's leasehold include: a Portland General Electric Company (PGE) easement in 1988 for underground electrical utilities; a Pipeline Crossing Agreement (license) from UPRR in 1996 allowing KMBT to construct, maintain, and operate a domestic sewer pipeline; and a Revenue Sharing Agreement with Union Pacific.

In 2006, the Port completed the construction of the Pier 2 rail yard. The project created a nine-track yard for inbound railcars north of the KMBT leasehold. The project also relocated the locomotive tail-track from the dock to a location north of Wheeler Bay. All but two dumper pit / outbound car storage tracks were eliminated on the dock. Portions of the storm water system were modified in 2006 during the Pier 2 rail yard construction.

2.3 UTILITIES

PGE provides electricity to the subject site. Potable water is obtained from the City of Portland's public water system. Sanitary wastewater is discharged to the City of Portland's sanitary sewer system. Storm water discharges through a storm water outfall (which drains into the Willamette

River), or to an on-site wastewater treatment system, which discharges to the sanitary sewer system.

2.4 SITE VICINITY AND ADJOINING PROPERTIES

A limited visual reconnaissance was performed of adjoining properties, and surrounding property uses were discussed with site representatives. The surrounding properties are strictly industrial in nature. Properties or land uses that would be defined as a REC for the subject site were not identified on adjoining properties. Properties and features that surround the subject site are as follows:

North:	Vacant industrial land (paved area owned by the Port) on which the Pier 2II railyard was constructed in 2006.
East:	UPRR right-of-way
South:	Slip 3 (Berths 410 and 411)
West:	The Willamette River

3.0 PHYSICAL SETTING

The physical setting and environmental characteristics of the subject site are based on the site reconnaissance and review of public documents and documents provided by the Port (referenced in Section 8.0).

3.1 TOPOGRAPHY

According to the Linnton, Oregon USGS 7.5-Minute Quadrangle map (USGS, 1984), the topography of the subject site is relatively flat, with an elevation of approximately 30 feet above msl. The ground surface consists mainly of asphalt or concrete, with areas of gravel and grass at the perimeter.

3.2 SURFACE WATER

The nearest surface water to the subject site is the Willamette River, located directly adjacent to the site to the West (Figure 1). The Willamette River flows from the southeast to the northwest and discharges into the Columbia River approximately 4.75 miles to the northwest of the site. Tidal influences from the Pacific Ocean are transmitted through the Columbia River and affect the stage of the Willamette River as far south as Oregon City (approximately 20 miles south and upstream of the site). The adjacent stretch of the Willamette River is not used as a source of potable water, but is used for industrial and recreational purposes.

Surface water drains either across the site into storm water catch basins where it discharges through a storm water outfall (which drains into the Willamette River), or to an on-site wastewater treatment system (which discharges to the sanitary sewer system), or infiltrates into the ground through, and in the vicinity of railroad ballast in the eastern portion of the leasehold.

KMBT's wastewater treatment system diverts soda ash-containing surface water for treatment. Soda ash handling associated with KMBT's operations result in small amounts of soda ash mixing with stormwater and altering the pH. Stormwater from the dock gravity drains or is pumped to a pre-treatment system and then is discharged to the publically owned treatment system (POTW) under a pretreatment permit issued and administered by the City of Portland Bureau of Environmental Services. Over time, KMBT has modified the catch basins around its leasehold to include valves and sumps to divert stormwater and washdown water (from washing machinery and equipment) to the pre-treatment/POTW system. The pre-treatment system includes a 43,000-gallon concrete retention basin, an oil/water separator equipped with a 250 micron filter,; a sulfuric acid mix tank for pH control (equipped with probe for constant pH monitoring), and two surge tanks which were formerly needed to meter discharge rates to meet total dissolved solids limits.

Portions of storm water system were modified in 2006 as part of the Pier 2 rail yard construction.

3.3 GEOLOGY

The subject site is located at the northern portion of the Willamette Valley physiographic province, an elongated, roughly north/south trending alluvial plain that separates the Coast and Cascade mountain ranges. During the late Miocene epoch, uplift and tilting of the adjacent Cascade Range to the East and the Coast Range to the West created the topographically low trough of the Willamette Valley (Orr, et. al., 1992).

The site is underlain by sand consisting of fill dredged from the riverbed. The fill unit is approximately 25 feet thick. The dredge fill is underlain by alluvium that consists of an upper coarse-grained unit and lower fine-grained unit. The upper alluvial unit consists of sand or sand and clay. The lower portion consists of silt and clay. The alluvial unit is approximately 180 feet thick (URS, 2004).

The sedimentary deposits are underlain by the Miocene- to Pliocene-aged Troutdale Formation, which consists of various subunits. In the vicinity of the site the Troutdale Formation is composed primarily of well-sorted sand and gravel with cobbles. The Troutdale Formation is underlain by volcanic rocks of the Columbia River Basalt Group. Near the subject site the Columbia Basalt Group consist of primarily dense, fine-grained basalts. The depth to bedrock below the site is expected to be approximately 800 feet bgs (Swanson, et. all. 1993). These volcanic rocks reach a thickness of at least 1,000 feet.

3.4 HYDROGEOLOGY

Groundwater is not used as a potable drinking water supply for the subject site or immediate area. The site overlies an unconsolidated, unconfined aquifer that consists of Pleistocene- and Holocene-aged alluvium deposited along the major rivers of the area, overlain by dredge fill.

Tidal influence from the Pacific Ocean is transmitted through the Columbia River and affects the stage of the Willamette River in the site area. These fluctuations are expected to have a limited influence on groundwater levels beneath the subject site. Based on groundwater data from nearby borings and monitoring wells, depth to groundwater is between 15 to 25 feet bgs across the site. Groundwater depths are anticipated to vary seasonally, with shallower groundwater depths occurring during the wetter winter season.

The direction of groundwater flow in the unconsolidated formation is assumed to generally follow topography and move in a westerly direction, toward the Willamette River and Wheeler Bay, or south towards Slip 3. Groundwater flow direction was not verified through direct measurement of monitoring wells.

4.0 PREVIOUS ENVIRONMENTAL REPORTS AND SITE HISTORY

The history of the subject and adjoining properties was developed with information provided by the Port and the review of one or more reasonably ascertainable standard and other historical sources referenced below and in Section 8.0.

4.1 PREVIOUS ENVIRONMENTAL REPORTS

The Port provided documents containing information relating to historic and current site operations and activities. The documents are listed below in descending chronologic order, followed by a summary of the report findings:

4.1.1 Documents

Terminal 4, Electrical Transformer Locations, Site Plan, Drawing Number T4 85-12 (The Port of Portland, 1985)

- This is a site map referencing the locations of former PCB-containing transformers and is included in Appendix A.

Tank Management Manual-Marine Terminal 4 (Century West Engineering Corporation, 1995)

A Storage Tank Location Map in this report shows one existing and one pre-existing UST on the subject site near the pit/rail dump building. The following provides a description of the USTs:

- Tank T4-24 was a 10,000-gallon capacity underground storage tank owned by KMBT that was formerly located north of the northeast corner of the pit/rail dump building. The tank was likely decommissioned and replaced by T4-43. No other information was provided. The tank was referenced on a Port drawing M86-4 8/10.

Tank T4-43 is a 5,000-gallon double-walled fiberglass diesel tank owned by KMBT which is located north of the northwest corner of the pit/rail dump building. The tank is registered with DEQ (UST File Number #9786). The tank is equipped with interstitial leak detection, but does not have system piping leak detection.

Excerpts from this document are included in Appendix B.

Terminal 4 – Track 401 Soil Sampling Project (URS Corporation, June 2001)

In 2001, in preparation of Track 401 repair work, URS, at the request of the Port, collected soil samples along the Track 401 alignment to characterize shallow materials for proper management. The repair work included removing and replacing materials beneath approximately 710 linear feet of track.

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Soil was assessed based on the known presence of pencil pitch and the historical usage of the rail segment. Discrete soil samples were collected from five locations along the rail segment. At each location, samples were collected from depths of 0 to 6 inches, 6 to 12 inches, and 12 to 16 inches bgs, composited into three samples based on the depth of sample collection, and analyzed for total metals and metals by toxicity characteristic leaching procedure (TCLP). The analytical results indicated a maximum leachable lead concentration (by TCLP) in the shallow soil of 194 mg/L. At the intermediate and deep samples, TCLP maximum lead concentrations were 2.42 mg/L and 0.13 mg/L respectively, suggesting minimal leaching potential of lead from the surface soil.

Based on the results, URS concluded that the lead-impacted soils were probably limited to the shallow interval, but may be present in the intermediate interval as well. Recommendations included segregating soils during the track work and disposing of portions of the soil as hazardous waste based on the analytical results.

Constituents of interest in the railroad alignments were subsequently addressed in the Remedial Investigation (RI). The results of the RI work are discussed in Section 7.

Draft Remedial Investigation Work Plan, Port of Portland, Terminal 4 Slip 1 Upland Facility (URS Corporation, May 2004)

Historical information related to Terminal 4 and the subject site was excerpted from this document and is included in Section 4.2.

Asbestos and Lead-Based Paint Survey Report, Dravo Crane T4 Portland, OR prepared for Port of Portland (PBS Environmental, December 15, 2006)

In 2006 PBS, performed a pre-demolition hazardous materials survey of accessible areas of the Dravo Crane at T4 to locate suspect asbestos containing material (ACM), lead based paint (LBP) and other hazardous materials that may be impacted by demolition of the Dravo Crane. Samples were collected from wall panel coating, brake and clutch pads, and electrical components from the mechanical house wall, winch motor brakes and the mechanical house. ACM was identified in the wall panel coating, brake pads and electrical components. PBS noted that additional quantities may be discovered during the demolition of the crane. Representative LBP chips were collected from the Dravo Crane. Samples indicated lead concentrations ranging from 11,600 ppm to 31,500 ppm. It was noted that the paint was peeling and in poor condition at the time of the survey. One paint sample was also tested for RCRA 8 Metals. Analytical results showed concentrations of barium (71 ppm), chromium (11,000 ppm) and lead (348,000 ppm). The concentration of lead reported was later determined to be erroneous (see following section). Additional potential environmental hazards associated with the contemplated demolition were also reported for the crane, including hydraulic fluids associated with the crane's systems and pigeon excrement which have posed a respiratory hazard to demolition workers. A copy of this report is included in Appendix C.

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Wy'East Laboratory Report #62887 to PBS Environmental, (December 15, 2006)

An error was made in calculating the lead concentration of sample 2001/R6094 in connection with the pre-demolition assessment of the Dravo. The initial concentration was reported at 348,000 ppm, but was later recalculated with a resultant concentration of 26,200 ppm. A copy of this corrected Lab Report and accompanying transmittal letter is included in Appendix D.

Phase II Pencil Pitch Investigation Report Terminal 4 Slip 3 Upland Facility (Ash Creek Associates, Inc. July 2007)

Ash Creek Associates performed a second phase of characterization to assess the lateral and vertical extent of PAHs associated with pencil pitch observed in riverbank soils near Slip 3. The work was conducted pursuant to a Voluntary Cleanup Program (VCP) agreement between the Port and DEQ (June 27, 2002), a Record of Decision (2002 and 2003), and a Consent Judgment dated October 2004. The objective of the investigation was to determine whether pencil pitch or PAHs were present in potentially erodible soils along the riverbanks of the uplands Slip 3.

The initial pencil pitch investigation (2005) did not fully define the extent of the PAHs associated with the pencil pitch in the riverbank areas. Concentrations of PAHs were detected in the river bank and slip 3 bank areas above Probable Effects Concentrations (PECs). Additional characterization was recommended to fully characterize the extent of the PAHS and to assess appropriate remedial actions. The slip 3 bank area is located at the southeast corner of the KMBT leasehold boundary. The river bank area is located across the Slip 3 and south of the leasehold boundary approximately 500 feet.

The Phase II investigation included three separate sampling events (February, March and April 2007) from which samples were collected and submitted for TPH and PAH analyses. Samples collected from the slip 3 bank area were collected from the upland soils at depths of 0-2.5 feet and at five feet. Slip 3 bank samples contained PAHs at concentrations exceeding one or more RBC at the 0-2.5 feet depth, while none were reported above the RBCs at a depth of five feet. Analysis of river bank samples indicated that certain PAH concentrations exceeded PECs. Ash Creek recommended removal of shallow soils (upper 2 feet) in the slip 3 bank area and replacement with clean fill and riprap. For soils located in the upland area, capping the impacted area with asphalt was recommended. A source control plan for the Riverbank area was also recommended.

Currently, a Source Control Measure Alternative Evaluation is being prepared by the Port to assess an appropriate source control measure (SCM) to mitigate the potential for the soil to erode into the river. In addition, a Contamination Media Management Plan (CMMP) is being prepared to identify and document the appropriate actions to limit human exposure to this soil.

Remedial Investigation Report. Terminal 4 Slip 1 Upland Facility, prepared for the Port of Portland (Ash Creek Associates, Inc. August 2007)

Ash Creek Associates performed a Remedial Investigation of the upland portion of the Terminal, Slip 1 area during 2004 and 2005. This report summarizes the results of three phases of

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Remedial Investigation (RI) sampling activities that were carried out in order to characterize soil and groundwater conditions in this upland area. Select figures from the report are included in Appendix E. This report does not discuss the adjacent in-water studies (below the line of ordinary low water), nor does it discuss the information regarding the storm water system. The RI report covers the entire Terminal 4 Slip 1 area, dividing it into two operable units: Operable Unit 1 (OU1), which is uplands north of Slip 1, and Operable Unit 2 (OU2), which is uplands east and south of Slip 1 and extends to the bank of Slip 3 (see Figure 5 in Appendix E). The subject KMBT property consists of a small portion of Terminal 4 near the southern boundary of OU2 (see Figure 1 in Appendix E).

Based on historical data, site observations, and interviews, 48 areas of concern (AOCs) were identified during the scoping of the RI process. Only three of these initial AOCs were on the subject property: AOC 54 (Hall-Buck UST - T-24), AOC 57 (referred to in the RI as the “Kinder Morgan Former Railcar Wash Area”), and AOC 73 (Berth 411 Pencil Pitch Handling Area) (see Figure 6 in Appendix E). Subsequent to the completion of the RI, KMBT communicated to the Port that a railcar wash area never existed on its leasehold. Port review of historical Terminal 4 records did not identify information reflecting the presence of a former railcar wash area within the leasehold. In 2009 URS was not able to reconfirm the railcar wash area historic information.

Two additional AOCs, AOC 63 (Former Ore/Product Handling and Storage Locations), and AOC 83 (Erodible Bank Areas) are adjacent to the subject property, located between the subject property and the Willamette River, and one AOC, AOC 72 (Railroad Alignments) is located to the northeast. Although not discussed quantitatively in this report, storm water discharge to the Willamette River is also a potential concern. The subject property is almost entirely contained within storm water Basin L, which discharges to the river at Outfall L (see Figure 4 in Appendix E). A small portion of the leasehold is within storm water Basin K.

During the three phases of the RI, a total of 134 surface/shallow soil samples (0 to 3 ft below ground surface [bgs]), 49 subsurface soil samples, 77 grab groundwater samples, and groundwater samples collected from 24 wells over the period of one year, were collected and analyzed for a wide variety of chemicals of interest (COIs). The data were screened against the following preliminary screening levels:

- Human Health for Soils – EPA Region 9 preliminary remediation goals (PRGs) for industrial soils (EPA, 2004) and Appendix A of the Oregon DEQ guidance for Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sediments (DEQ, 2003).
- Ecological Receptors for Soils – DEQ Screening Level Values (SLVs) for terrestrial receptors (DEQ, 2001).
- Human Health for Groundwater – Federal Ambient Water Quality Criteria (AWQC) for protection of human health regarding fish consumption (EPA, 2002).

- Ecological Receptors for Groundwater – Federal AWQC continuous concentration (CCC) values for freshwater biota (EPA, 2002) or DEQ SLVs for aquatic biota (DEQ, 2001).

Multiple soil and groundwater samples had COI concentrations exceeding one or more of the above screening values. However, with the exception of a few localized areas of soils (none of which are on the subject property), the COIs were detected intermittently and at low concentrations. On the subject property, one surface soil sample contained lead and zinc concentrations exceeding the terrestrial SLVs, but no human health PRGs were exceeded. Groundwater samples from two of the four monitoring wells on the subject property (MW-15 and MW-16) exceeded human health and/or ecological screening levels for arsenic, copper, lead, cadmium, carbon disulfide, and multiple polycyclic aromatic hydrocarbons (PAHs).

According to the RI report, human health and ecological risk assessments concluded that, except along the erodible riverbank, complete pathways generally do not exist to link contaminated soils to potential receptors. The report states that lack of access limits human exposure to the few areas of contaminated soils. Similarly, it concludes that insufficient habitat exists to attract terrestrial receptors to the area so the occasional exceedances of terrestrial soil SLVs should not be considered a concern. Regarding groundwater, the RI states that the only beneficial use of the site groundwater is discharge to surface water (i.e., the Willamette River). The RI report further concludes that many of the observed groundwater screening level exceedances are the result of entrained soils (and therefore are not representative of dissolved groundwater concentrations). For those groundwater COIs which consistently exceed screening levels, a mixing model was used to predict COI concentrations in surface water after discharge to the river. Based on the results of the model, the RI report concluded that the groundwater does not pose an unacceptable risk to humans or wildlife.

The RI report concluded that no groundwater remediation or source control was required. With regard to the soils, the report states that the erodible riverbank soils were recommended for remedial action and source control options were being evaluated. The report also identified two limited areas in OU1 (away from the subject property) that may require remediation following additional study.

Storm water runoff from the subject property discharges to the Willamette River from Basin L through Outfall 001. The Port is currently conducting a storm water characterization and source control evaluation at Terminal 4 Slip 1 and Slip 3 as required by DEQ under the Voluntary Cleanup Program agreements. Two milestone reports submitted by the Port to DEQ for this effort, include: *Final – Storm Water Data Summary Report, Terminal 4 Slip 1 and Slip 3 Uplands Facilities, March 2009* and *Storm Water Source Control Evaluation, Terminal 4 Slip 1 and Slip 3 Upland Facilities, September 2009*. Data presented in these report suggest that PAHs, PCBs, pesticides, and metals may be discharging to the river at concentrations exceeding acceptable levels based on DEQ's conservative screening level values. This evaluation is ongoing to assess what, if any, storm water source control measures are needed at these Upland Facilities.

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Remedial Investigation Acceptance Letter from DEQ to Nicole LaFranchise of the Port of Portland, dated October 8, 2007.

DEQ issued a letter to the Port, dated October 8, 2007, accepting the August 2007 Remedial Investigation Report without further comment. DEQ acknowledged that the stormwater evaluation was not completed and requested the Port submit the results as an RI addendum when complete. With the conclusion of the RI work, DEQ requested commencement of the Feasibility Study.

4.1.2 Interviews

Mr. Brad Clinefelter (Terminal Manager) and Mr. Marco Ullmer (Regional Environmental, Health & Safety Manager) of KMBT were interviewed on June 16, 2004 by Mr. Matt Mudge of URS. They led a tour of the facility operations that included physical inspection of all buildings and staging areas. Information discussed with Mr. Clinefelter and Mr. Ullmer included but was not limited to, site history, site use, hazardous substance storage and use, waste disposal areas, and sewer or septic systems.

Mr. Phil Ralston (Port Environmental Project Manager) was interviewed on June 16, 2004. He provided additional information regarding past and present site use, and future plans for the subject site.

David Breen (Port of Environmental Project Manager) was interviewed on October 18, 2007. He accompanied Ms. Jennifer Renninger of URS around the site. Ms. Jennifer Fonseca-Littrel (Port Property Administrator) was contacted on December 3, 2007 regarding PCB and LBP sampling results for the Dravo Crane.

Ms. Renninger also interviewed Mr. Brent McMullen of the KBMT via telephone on December 3, 2007. He provided information regarding USTs at the site and PCB containing equipment. Copies of UST permits are included in Appendix F.

4.1.3 Other Information

Asbestos – In accordance with the Scope of Services, URS did not conduct an asbestos survey or evaluate the adequacy of the documents reviewed.

Lead Paint – A lead-based paint survey was not conducted as part of this Phase I ESA.

Drinking Water – Tests of the drinking water quality within the subject site was not performed for this Phase I ESA.

Radon – Tests for radon within the subject site buildings was not performed for this Phase I ESA.

4.2 HISTORICAL REVIEW

The following text is excerpted from the Terminal 4 Slip 1 Upland Facility Remedial Investigation Work Plan, prepared by URS for the Port and has been updated where appropriate.

4.2.1 Physical History

The landscape and physical features of Terminal 4 have changed significantly in the past century with the preparation of the land for use as a marine terminal. What was once Willamette River floodplain occupied by grasslands, wet prairies, and small ponds was modified by grading, dredging, and filling beginning as early as 1906.

Prior to development, the banks of the terminal location were lined with trees, and a former drainage way identified as Gatton Slough (which discharged to the Willamette River) traversed the northern portion of the Terminal. A small stand of trees was located on the floodplain immediately south of the slough, beyond which were several small swales and ponds. The remainder of the area was occupied by grasslands, which were probably wet prairies. A U.S. Coast and Geodetic Survey map from 1895 depicts a building (possibly a farmhouse) located at the eastern edge of the floodplain (southeast of the location of the now-removed Warehouse 6) along with a series of trees suggestive of a small orchard.

In 1897, the Ogden family purchased the land around lower Gatton Slough. They built a house on the higher ground overlooking the floodplain, probably close to the modern entrance to Terminal 4 on North Lombard Street. In addition to farming, the Ogden family reportedly drilled for oil near the mouth of the slough, without success.

The rural landscape portrayed in the 1895 map began changing in the first decade of the 1900s. The first development at Terminal 4 occurred in 1907 to 1908 when the Oregon-Washington Railroad and Navigation Company (OWR&N Co., a Union Pacific Railroad affiliate and part of the Union Pacific Railroad system, hereafter referred to as Union Pacific) constructed a railroad along the eastern edge of the floodplain (the railroad alignment now serves as the eastern boundary of Terminal 4). By 1912, Union Pacific had constructed its oil-supply dock for locomotives and, on the east slope above the rail tracks, the St. Johns Tank Farm which was used as a locomotive fueling station. Photographs from 1917 indicate that an oil pipeline extended east from the river across the floodplain to the tank farm. The oil pipeline later became an underground structure, and was presumably buried when the area of Slip 3 was filled and graded for development. The date of burial, however, has not been verified. The pipeline alignment was along the south side of where Slip 3 would later be constructed. The oil was pumped uphill from the oil-supply dock to the tank farm.

In 1917, the site preparation for the development of Terminal 4 began. Trees and other vegetation were removed over most of the floodplain in the northern Terminal 4 area, and dredged fill material was deposited across the low-lying ground and then leveled with horse teams. Most of lower Gatton Slough was filled at this time as well. Beginning about the same time, fill was also placed into the offshore shallows to extend the riverbank out into the channel.

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The 1895 U.S. Coast and Geodetic Survey map labeled the offshore area as “Linton Shoal,” with water less than a meter deep in places. Filling this area was relatively easy and provided the new Terminal 4 with a larger land base. As described in more detail below, the northern Terminal 4 facilities included Piers 1 and 2 at Slip 1 and Pier 5 at Slip 3. A Slip 2 was planned and partially excavated but never completed. The remnant Slip 2 is known today as “Wheeler Bay.” Photographs taken in 1917 trace the rapid transformation of this landscape.

Pre- and post-construction maps of and plans for Terminal 4 indicate that substantial changes occurred in the landscape with the development of Terminal 4 from 1917 to approximately 1921. First, construction of the terminal involved placement of fill that extended 650 to 975 feet (ft) from the original riverbank. Second, the construction of Slips 1, 2, and 3 also required excavations into the original shoreline. Slip 1 was located at the entrance to Gatton Slough, and the head of the slip extended up to 650 ft inland from the original riverbank. These excavations probably removed much of the upriver portion of the mouth of the slough; the downriver portion of the slough entrance was covered by Houses 1 and 2 at Pier 1 and portions of the grain complex. The inland excavations for Slips 2 and 3 (although Slip 2 was never finished) extended from 440 to 565 ft back from the original shoreline. The northern portion of Terminal 4 was thus developed through a combination of fill outward from the original riverbank and excavations into the original floodplain. All traces of lower Gatton Slough were lost either through burial under fill or removal for the creation of Slip 1.

4.2.2 Property Acquisition and Development

Originally called the St. Johns Municipal Terminal, Terminal 4 was developed by the City of Portland Commission of Public Docks (City CPD) as a result of the push by the City to become a world-class shipping port and to capitalize on growth in the shipping industry following the opening of the Panama Canal in 1914. Following the physical preparation of the land, the City CPD initiated construction for development of the property as a marine terminal.

The main building construction and other physical developments at Terminal 4 are summarized in Table 1 below. Note that warehouses at Pier 1 were called “houses,” while those at Pier 2 were called “warehouses.”

Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1906-07	St. Johns Tank Farm (with storage tanks and a pipeline to a terminal dock) constructed by Union Pacific at the future location of Slip 3; the facility handled Bunker C fuel oil for fueling steam locomotives south of modern Slip 3.

Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1917	\$3,000,000 bond levy approved on June 17, 1917 for land purchase and development. City CPD purchases 117.55 acres of upland and purportedly 36 acres of submerged land centered on Gatton Slough.
1917-20	Slips 1 and 3 dredged and Pier 1 (Berths 403-405), grain elevator, operating house, storage bins, track shed, and Warehouses 1-5 constructed. Spur tracks from existing Union Pacific lines constructed.
1919	Liquid bulk storage facility constructed at the head of Slip 1; House 4 constructed.
1919-20	Pier 2 and Berths 406-408 constructed. Vegetable oil weighing house constructed east of Slip 1.
1920	4.94-acre parcel acquired from Union Pacific adjacent to Slip 3; however, parcel developments (pipeline, oil supply tanks, and fuel oil dock) remained under ownership of Union Pacific. Flour mill, adjoining concrete warehouse for grain and flour, and Berth 409 constructed. Houses 1 and 2 constructed on the upstream side of Slip 1. Boiler house and service buildings (including an administration building, cafeteria/restaurant, and welfare building) constructed east of Slip 1.
1920-21	Substructure for Piers 3, 4, and 5 constructed (although Pier 3 was never completed). Quay dock, bulk handling facility, and Berths 412 and 413 completed on the upstream side of Slip 3. Union Pacific pipeline extended to service Berth 412 at Pier 5, Slip 3.
1920-24	Filling platform for liquid bulk storage facility constructed east of Slip 1.
1921	Storage bunkers constructed east of Slip 3.
1921-22	Warehouses 6 and 7 constructed on Pier 2, Slip 1 serviced by Berths 406 and 407.
1922	House 5 constructed perpendicular to House 4 along the river.
1923	Houses 6, 7, and 8 were constructed perpendicular to House 5 as a cold storage plant and ventilated warehouse. A 150,000-gallon elevated water tank was constructed. H.R. Leckenby fumigation plant constructed.
1930	Grain storage annex constructed north of the grain elevator.

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Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1931	Tanks added to liquid bulk storage facility.
1932	Gearlocker building constructed north of the liquid bulk storage facility.
1940-41	Berth 401 and Airveyor system for unloading bulk grain from barges constructed on the harbor side of Houses 4 and 5 at Pier 1 for grain unloading.
1942	At the onset of WWII, the U.S. Army Transport Service (ATS) leased Terminal 4 from City CPD for Portland's Sub-Port of Embarkation. ATS added a second story to the gear locker building. The ATS rehabilitated the loading apron at Pier 1, replaced decking and rehabilitated railroad track at Pier 2, and rehabilitated the slip side of Pier 5.
1944	Auxiliary pipeline constructed by the ATS at Slip 3 Pier 5.
1946-47	The ATS relinquished Terminal 4 to City CPD. Bulk loading facility constructed at Berth 412 on the slip side of Pier 5.
1948	20-acre parcel south of Pier 5 acquired from Union Pacific.
1951	A railcar dumper and a hydraulic truck unloading hoist and dust collection system were added to the grain facility at Pier 1.
1953	Oil packaging plant constructed and eight aboveground storage tanks (ASTs) and an underground transfer pipeline installed at the head of Slip 3 by Quaker State for oil storage.
1954	Eight steel ASTs for grain storage constructed east of the grain storage buildings at Slip 1. Electric elevator system at grain elevator modernized.
1955	Pier 2 rehabilitated and two gantry cranes added. Berths 410 and 411 constructed on the downstream side of Slip 3. Fumigation plant removed.
1957	Berth 401 renovated.
1957-58	19.64-acre parcel upstream of Pier 5 acquired from Multnomah County.
1958	Second gallery for grain loading added at Pier 1.

Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1962	Pier 5 harbor-side wharf and Berth 409 at the head of Slip 1 removed. Dravo bulk unloader installed at Pier 4.
1963	Head of Slip 1 developed as small boat landing.
1966	Five tanks constructed by Pacific Molasses added to liquid bulk storage facility.
1968	Warehouse 4 constructed at Pier 2. Matson Navigation Co. installed 33-ton-capacity container crane on Pier 2. Three 36-ton revolver cranes purchased and installed at Pier 4.
1968-69	Berths 404 and 405 reconstructed (Berth 405 to handle offloading of barges for grain). Coal bunkers removed at Pier 5.
1971	Grain elevator remodeled; Union Pacific abandoned existing pipeline to St. Johns Tank Farm and installed a replacement pipeline. City CPD merged with the Port of Portland. Terminal 4 property and operations transferred to Port as part of the merger.
1973	Land purchased from Broadway Holding Company. House 8 demolished at Pier 1. Berth 417 constructed southwest and upstream of Slip 3.
1975	Berth 401 reconstructed to handle ships, adding grain loading equipment and conveyor system.
1978	Cold storage plant and ventilated warehouse (Houses 6 and 7) at Pier 1 removed.
1983	Union Pacific's operation of the St. Johns Tank Farm tanks and replacement pipeline ceased.
1984	Boat landing at the head of Slip 1 removed and ro-ro dock, called Berth 409, constructed in its place. Service buildings removed, including an administration building, cafeteria/restaurant, and welfare building. Whirley cranes removed from Berths 410 and 411.
1985	Quaker State ASTs and underground pipeline removed.
1986	City of Portland began construction of Outfall 52C and the associated storm sewer system serving Lombard Street properties.

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Table 1
Chronology of Facility Development
Port of Portland Marine Terminal 4
Portland, Oregon

Year	Entity and Event
1987	Bulk out-loading facility constructed at Pier 4 by Hall-Buck Marine. PCBs were removed from the Dravo at this time. Construction of City drainage system and Outfall 52C at the head of Slip 1. Tanks removed from Union Pacific's St. Johns Tank Farm.
1988	Diesel and gasoline underground storage tanks and fueling station installed by Oregon Terminal Company on the south side of the at the gearlocker building.
1989	Second railcar dumper added to grain facility. Two pipes added at Pier 1 for liquid bulk storage facility.
1990	House 4 condemned.
1991	Guard station constructed.
1992	Four of the steel ASTs for grain storage (east of the storage bins to the north of Slip 1) modified.
1992-93	Downstream row of tanks at original liquid bulk storage facility removed.
1994-95	All but five of the tanks remaining at liquid bulk storage facility removed.
1995	Soda ash storage building constructed at Pier 4.
1996	House 1, House 2, Berth 406, and Berth 407 at Pier 2 dismantled
1996	Oregon Terminal Company's diesel and gasoline underground storage tanks removed.
1997	Pipeline for liquid bulk storage facility rebuilt under Berth 408.
1997-98	Portions of Union Pacific's decommissioned/abandoned St. Johns Tank Farm pipeline removed from under Berth 412 and elsewhere.
1999	Houses 3, 4, and 5 and Berths 403 and 404 demolished. Mechanical/electrical building and bridge to Berth 401 constructed.

4.2.3 Historical Terminal Operations

The City of Portland Commission of Public Docks (City CPD) owned and operated the Terminal 4 property from 1917 to 1971. Activities that occurred on the Terminal 4 property pertinent to this audit during City CPD ownership included 1920 pencil pitch, petroleum products, soda ash, talc, sulfur, zinc, lead and copper ores/concentrates, bentonite clay, coal, coke, and iron briquettes. Historical tenant operations at Terminal 4 relating to the current KMBT leasehold area are discussed below.

Ore and Concentrate Handling

From 1955 to 1956 and in 1963 (during CPD ownership), alumina/bauxite and chromite were handled at Pier 2 (Berths 406-408) and Pier 2 (Berths 410 and 411). Starting in 1955, lead and zinc concentrates were directly transferred from ships in Slip 1 to open Union Pacific gondola rail cars by two gantry cranes at Pier 2 equipped with clamshell buckets. The transfer of lead and zinc concentrates at Terminal 4 was relocated to Pier 5 at Slip 3 (Berths 412 and 413) in 1961 with the completion of Pier 4 at Slip 3 and the Dravo bulk unloading tower and continued through 1971. KMBT (then known as Hall-Buck) entered into a lease agreement with the Port on October 30, 1987 to construct and operate a facility for the import of pencil pitch, export of soda ash, bulk clay, and compatible mineral bulk products at Slip 3, Berths 410, 411ⁱ and 412. KMBT also held a lease for the Dravo which terminated on June 14, 1998. KMBT currently leases Pier 4 and adjacent area for loading of soda ash onto ships at Berths 410 and 411. Soda ash, initially exported from Pier 5, Berth 412, became a major export in 1988, when loading was transferred to Pier 4, Berths 410 and 411, where a new bulk outloader was constructed by KMBT. The Dravo unloading tower remained in service until 1998, when it was decommissioned.

Pencil Pitch Handling

Pencil pitch is a coal tar distillate used as anode material at aluminum refineries throughout the Pacific Northwest. It is manufactured by extruding finger-width coal tar pitch "pencils." The pencil pitch was manufactured in Germany and China and purchased by Koppers Industries, Inc. Ships carrying the pencil pitch were moored at Berth 411 in Slip 3. Longshoremen removed the pencil pitch from the ships' holds by means of the clamshell-equipped Dravo unloading tower on Pier 4 and loaded it directly onto truck trailers or rail cars adjacent to the pier. Available Port records indicate that pencil pitch was handled at Terminal 4 from 1978 to 1998.

Jones Oregon Stevedoring held agreements with the Port to unload pencil pitch at Berths 410 and 411. Jones had the Bulk Cargo Handling pencil pitch contract from July 1, 1980 through June 30, 1981. Jones also had the pencil pitch unloading contract for July 1, 1982 to June 30, 1983.

ⁱ 09-22-1987 Permit of entry for Hall Buck, page 2

Stevedoring Services of America was the stevedore for 8 pencil pitch vessel unloadings between September 1985 and December 10, 1987.

From March 9, 1988 to June 14, 1998, pencil pitch unloading was handled by KMBT. In 1998, KMBT ended bulk import of pencil pitch at Terminal 4. The Dravo unloading tower was decommissioned that same year.

4.2.4 Permits

The following environmental permits and applications relevant to the subject property through 2004, were identified by the Port in available records and presented in the Port's 104(e) response to EPA Region X. URS did not review the Port's 104(e) response.

- On September 11, 1984, DEQ issued Air Contaminant Discharge Permit Number 26-2909 for the discharge of exhaust gases from the bulk commodity import and export facility.
- On November 19, 1984, Greenway Permit #GP 24-84 was issued by the City of Portland, Bureau of Planning to construct a dry bulk handling facility.
- On December 17, 1984, DEQ issued Air Contaminant Discharge Permit Number 26-2909 to the Port for the dry bulk handling facility.
- On March 11, 1985, DEQ issued Waste Discharge Permit No. 100039 to the Port to discharge wash water to the river.
- In 1988, DEQ transferred the Port of Portland's Air Contaminant Discharge Permit 26-2909 and Waste.
- On October 2, 1987, the City of Portland issued a conditional permit for a one-time discharge of wastewater generated from pencil pitch unloading to the sanitary sewer.
- On March 11, 1989, DEQ issued an NPDES Waste Discharge Permit Number 999865 to the Port for the dry bulk handling facility.
- On April 4, 1989, DEQ issued Hall-Buck a modification to their Air Contaminant Discharge Permit No. 26-2909.
- On September 1, 1991, the City of Portland issued waste discharge permit (400-027) to Hall-Buck Marine to discharge industrial wastewater to the City's sewer system.
- On September 1, 1991, the City of Portland issued a modification to Industrial Waste Discharge Permit 400-027 for Hall-Bulk Marine.

- On October 9, 1992, DEQ issued Storm Water Discharge Permit 1200-T to Hall-Buck Marine to discharge storm water to public waters.

4.2.5 Regulatory Compliance and Hazardous Substances Releases

This section presents available information on regulatory compliance and hazardous substance release information through 2004.

- On May 7, 1971, a release of a small quantity of bauxite ore occurred to the Willamette River during unloading operations on the vessel M/V DONA AMALIA at Pier 4.
- On March 8, 1981, a large oil spill was found at Berth 414 after the vessel PACIFIC QUEEN departed and reportedly cleaned its bilges. The Coast Guard and DEQ were notified.ⁱⁱ
- On January 30, 1985, an oil slick at the bow of the vessel CELTIC PRINCESS at Berth 410 was observed. The vessel crew said they were not responsible for the oil slick and its origin remains underdetermined.ⁱⁱⁱ
- On March 26 and 27, 1986, Coastguardsmen observed pencil pitch being washed from the pier into the river.^{iv}
- On March 28, 1986, a report was made to the U.S. Coast Guard that 300-500 pounds of pencil pitch was washed into the river at Berth 411.^v
- On March 31, 1986, the U.S. Coast Guard observed pencil pitch in the Willamette River at Terminal 4. The pencil pitch was from the pier being washed into the river.^{vi}
- On December 2, 1986, the U.S. Coast Guard observed a small quantity of pencil pitch dust that was blown into the water from pier.^{vii}
- On April 1, 1987, the Coast Guard observed pencil pitch being hosed down from the pier and into the water.^{viii}

ⁱⁱ POPGPA00171133 (pg 6 in brief case)

ⁱⁱⁱ POPGPA00171123 (pg 6 in brief case)

^{iv} POPGPA0010334, pg 6 (pg 4 brief case)

^v POPGPA00103384 (pg 6 in brief case)

^{vi} POPGPA00103695 (pg 6 in brief case)

^{vii} POPGPA00103344 pg 6

^{viii} POPGPA00103344, pg 6 (pg 4 brief case)

SECTION FOUR

Previous Environmental Reports and Site History

- On October 16, 1987, pencil pitch was spilled into the Willamette while Jones Oregon Stevedoring was unloading the vessel PARKGRACHT. Approximately one or more patches 200 to 250 feet long by 30 feet wide were floating in the river.
- On November 17, 1987, the Port identified the following leaking PCB transformers at Terminal 4:
 - 225 KVA PCB (Serial #C862333) – transformer inside the Dravo machinery house. A moderate amount of fluid leaked from transformer side of upper fill/vent valve. There is no indication the oil was released outside of the machinery house and this transformer has since been removed.
 - 500 KVA transformer (Serial #C862942), 12,000 V to 480/227 V – located inside the Pier 4 transformer house. A slight leak from the drain valve resulted in a spot of fluid on the floor. There is no indication the PCB fluid was released outside of the transformer house and this transformer has since been removed. PCBs were removed as part of KMBT's upgrades in 1987/1988.
- On December 30, 1988, March 21, 1989 and May 23, 1989, Notices of Non-Compliance were issued to the Port for soda ash spills at Berth 411. On April 25, 1989, approximately 35 gallons of PCB-containing fluid was released at the Pier 4, Berth 411 electrical substation by W.R. Grasle Company. The spill was contained within the transformer room and an underlying utility tunnel. A cleanup was conducted by Riedel Environmental Services for WR Grasle under EPA oversight. Chemical Waste Management (CWM) transported and disposed of the contaminated soils from the PCB spill to their facility in Arlington, Oregon.
- On May 23, 1989, DEQ issued a Class II Violation to KMBT for visible emissions in excess of 20% opacity for a period aggregating more than thirty seconds in any one hour.
- Numerous releases of pencil pitch occurred at the Slip 3 Facility during the period Hall-Buck was handling the material and pencil pitch is an identified contaminant source in the upland soils and in-water sediments of Slip 3. Hall-Buck was cited by DEQ for numerous violations for pencil pitch handling. Documented releases of pencil pitch into the air, onto the Terminal, and/or into the river include the following incidents/notifications: March 15, 1988; January 5, 1990; February 25, 1992; March 2, 1992; May 28, 1993; July 30, 1996; September 25, 1996; and June 18, 1997.
- On March 7, 1992, a leak at Berth 411 occurred from a Brix Maritime barge fueling the vessel GORGOVA. The U.S. Coast Guard and a Brix investigator came to the site to evaluate the release.^{ix}

^{ix} POPGPA00153180 (pg 5 in brief case)

SECTION FOUR

Previous Environmental Reports and Site History

- Between February 21 and 25 [or March 1 and 4], 1992, during unloading of the vessel the M/V AGNESS, Hall-Buck released pencil pitch into the air. Fugitive dust from the release covered aluminum ingots being unloaded at Slip 1 Pier 2 and that operation had to be shut down pending cleanup of the material. Hall-Buck agreed to conduct a washdown of the affected areas and washdown water was subsequently collected and discharged to the sanitary sewer under Hall-Buck's Permit 400-027.
- On April 7, 1992, during transfer activities at Berth 411, approximately 300 gallons of black oil was released; the spill was reportedly contained on the vessel KEN SPANKER.
- On July 27, 1992, approximately 0.12 gallons of diesel released to river from overfilling during fueling operations on the carrier ANSAC PROSPERITY at Hall-Buck at Berth 411. Sorbents were used to collect the product.
- In December 1992, the U.S. Coast Guard observed a minor oil release to the Willamette River at Slip 3. The Port contracted Century West to initiate the abatement of the migrating oil seep.
- On December 25, 1992, approximately 10 gallons of a mixture of weathered light fuel and lube oils seeped into the Willamette River from soil at the east end of Berth 411. Floating booms were placed to contain further discharge.^x
- On February 27, 1993, diesel was spilled while transferring material to the M/V MAY STAR at Berth 411; quantity not reported, spill reportedly contained on vessel.
- On April 16, 1993, oil was observed on the water in Slip 3. The oil was being discharged with the treated water from the oil/water separator. Foss Environmental Services responded to clean up the oil in the boom area.^{xi}
- On August 27, 1993, an oil spill at Berth 410 at the stern of the vessel ANGEL HONESTY was observed. The Coast Guard was notified. The oil reportedly dissipated quickly.^{xii}
- On March 27, 1996, a release of oil occurred during fuel transfer to the M/V ANSAC ASIA when a tank was overfilled at Berth 411; approximately 1 gallon of 2-D fuel oil released to Willamette River; Riedel used sorbents to recover the material.

^x POPGPA00135785 pg 1 (pg 1 in 3/23 brief case)

^{xi} POPGPA00135920 pg 5

^{xii} POPGPA00171800, pg 2 (pg 4 in brief case)

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- On May 13, 1996, a thin sheen was observed in the river near Berth 411 by Port and Hall-Buck employees. It appeared that the source was from one of two operations: a broken-down crane the Port had on the dock may have leaked oil during servicing, or the source was Hall-Buck. Both the DEQ and the U.S. Coast Guard were notified.^{xiii}
- On March 10, 1997, rain washed oil off of the deck of the vessel M/V SEMENA; quantity not reported; cleanup undertaken and scuppers on vessel plugged. Specific location at Terminal 4 not reported.
- On May 20, 1997, approximately 1 teaspoon of 2-D fuel oil released during fuel transfer operations caused by a valve left open; vessel reported as M/V SEASWAN at Berth 411; absorbents used for cleanup of the spill.
- On May 28, 1997, an approximately 25' X 25' sheen was discovered around and emanating from vessel M/V MARITIME FAITH at Berth 411; cause unknown; quantity not reported.
- On June 18, 1997, approximately 200-1,000 pounds of pencil pitch entered Slip 3 after an operator error on the Dravo.^{xiv}
- In a 2004 settlement, KMBT agreed to pay \$75,000 to reduce dust by re-engineering the spout that drops the soda ash into ships, post permits, fix leaking railcars and clean up spills.
- Standard Air Contaminant Discharge Permit annual reports were made available to the Port for 1995 through 2004. A review of these documents shows no excess emissions with the exception of one event in 2004. Equipment upset conditions were reported in 1996 (2), 1997 (4), and 1998 (1). Fugitive dust complaints were received in 2001 (2), 2002 (2), 2003 (2), and 2004 (2).
- NPDES Permit monthly Discharge Monitoring Reports were made available to the Port for January 2002 through December 2004. One exceedance for oil and grease was reported for April 2004.

4.3 SUMMARY OF HISTORICAL FINDINGS

A review of historical Sanborn Fire Insurance maps provided by Environmental Data Resources, Inc. (Appendix G), aerial photographs provided by the University of Oregon Map Library (Appendix H), city directories, historical topographical maps, and information provided by the Port in documents or through interviews; indicate that the subject site's development was

^{xiii} POPGPA00202736 (pg 1 in 3/23 brief case)

^{xiv} POPGPA00209397 pg 2 (pg 6 in brief case)

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Previous Environmental Reports and Site History

initiated in the early 1900s with Union Pacific constructing storage tanks and a pipeline to a terminal dock at what is now the uplands east and south of Slip 3, outside the KMBT leasehold.

The City of Portland acquired approximately 154 acres for development and began dredging and filling the property starting in 1917. Over the course of the next 40 years, Terminal 4 began to take shape as a progressive location for industry growth. Modern development of Slip 3 and Pier 4 began in the mid-1950s.

Several RECs were identified based upon the review of available historical information. These included:

- The transfer of lead and zinc concentrates between vessel and shore at Terminal 4, relocated to Pier 5 at Slip 3 (Berths 412 and 413) in 1961.
- Pencil pitch handling between vessel and shore from 1978 to 1998. Numerous releases of pencil pitch occurred at the Slip 3 Facility and pencil pitch is an identified contaminant source in the upland soils and in-water sediments of Slip 3.

These issues are being addressed by the CERCLA removal action being undertaken by the Port under EPA and DEQ supervision under an EPA settlement agreement.

5.0 SITE RECONNAISSANCE

Mr. Matthew Mudge and Mr. Mike Edwards of URS conducted a reconnaissance of interior and exterior areas of the subject site on June 16, 2004. Mr. Brad Clinefelter, the Terminal Manager, and Mr. Marco Ullmer, both of KMBT, escorted the URS personnel throughout the site reconnaissance. Mr. Phil Ralston of the Port, accompanied URS and KMBT personnel during the site reconnaissance. Ms. Jennifer Renninger of URS conducted a brief reconnaissance of the site (exterior only) on October 18, 2007 and February 22, 2008. Photographs taken during the site reconnaissance are referenced in the following text and presented in Appendix I. URS' observations and findings are summarized below.

5.1 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

Hazardous substances and petroleum products are stored in the maintenance building at the subject site.

A storage area for gear oil, lubricating oil, and hydraulic oil drums was observed in the southeast corner of the maintenance building. Some of these drums were located within secondary containment structures (Photo 1), and the remaining containers were located on the maintenance building's concrete floor (Photo 2). Most of the drums were 55-gallon steel or poly drums. Minor staining was observed on the concrete floor under several drums.

Two steel cabinets located in the southern central portion of the maintenance building were used to store chemicals (Photo 3). These include degreasers, acetone, paint thinner, paint spray cans, and parts cleaners. Typical container size was less than one gallon. No spills, leaks, or stains were observed.

A parts-washer was also located in the southern central portion of the maintenance building (Photos 4 & 5). The parts washer consists of a drum with washtub attached to the top where the solvent is used, then drained back into the drum for reuse. No spills, leaks, or stains were observed.

Hydraulic machinery was observed at several locations around the facility, mainly associated with the pit/rail dump building.

The hydraulic machinery located along the south wall of the pit/rail dump building had minor staining on its concrete pad and absorbent pads were placed under the machinery (Photo 6).

The hydraulic machinery west of the pit/rail dump building associated with moving railcars also had minor staining on its concrete pad and absorbent pads were placed under and around the machinery (Photo 7).

In 2004, KMBT owned and maintained two forklifts, one front-end loader, and one vacuum truck. KMBT also leased a locomotive to collect railcars from the inbound tracks and move

them through the dumper. According to the Port, some maintenance of the locomotive occurred on site. Routine maintenance of vehicles operated by KMBT was typically performed inside the vehicle maintenance building. In addition to the chemicals described above, vehicle and equipment parts were also stored in the maintenance building. According to Mr. Clinefelter, KMBT contracted with a licensed contractor who regularly collects and disposes of, or recycles waste materials from the subject site.

5.2 ABOVEGROUND STORAGE TANKS

Several aboveground storage tanks (ASTs) are located at the site.

During the site reconnaissance; a 500-gallon capacity steel used oil AST was located in the southeast corner of the maintenance building (Photo 8). This AST did not have secondary containment. Minor staining was observed on the concrete floor under this AST. The tank has since been removed by KMBT.

An approximate 500-gallon capacity double-walled steel gasoline AST is located outside along the east wall of the maintenance shop (Photo 9). This AST is located in a fenced and secured area. No spills, leaks, or stains were observed.

An approximate 330-gallon capacity poly tote of sulfuric acid, used for pH adjustment, is located outside along the south central wall of the maintenance building (Photo 10). The tote is situated on a raised secondary containment platform and is located in a fenced and secured area. According to KMBT, the sulfuric acid is used in connection with the wastewater treatment system. No spills, leaks, or stains were observed.

Two steel ASTs of unknown size are also located on the subject site. Both are related to KMBT's wastewater treatment system. One AST is located inside the maintenance building (Photo 11), and one is located outside at the southeast corner of the maintenance building (Photo 12). Neither AST has secondary containment. No spills, leaks, or stains were observed.

5.3 UNDERGROUND STORAGE TANKS

One underground storage tank (UST) and associated pump island was observed on the subject site.

A 5,000-gallon double-walled fiberglass diesel UST is located at the northwest corner of the pit/rail dump building and is used primarily to fuel locomotives (Photo 13). This UST is equipped with interstitial leak detection equipment and is registered with DEQ (UST File Number 9786).

A document prepared for the Port by Century West Engineering Corporation in 1995 titled "Tank Management Manual-Marine Terminal 4" references a 10,000-gallon UST located near the pit/rail dump building (Appendix B). The document states that it was probably decommissioned by removal, but there is no documentation stating what type of UST it was,

whether the tank was removed, or whether confirmation sampling was conducted. Hall-Buck indicated that the UST was replaced by their current UST T4-43.

Although details on the UST removal were not available, T4-24 was evaluated during the RI for Slip 1 (AOC 54). Two soil borings (SB-51 and SB-52) were installed adjacent to the former UST. TPH was not detected above MRLs in the 11 and 12 foot samples from SB-51 and SB-52, respectively. VOCs were not detected in soil above the MRL with the exception of acetone, which was low and below the screening criteria. TPH, PCBs, and VOCs were not detected in grab groundwater above the MRLs with the exception of toluene detected in SB-51 at a concentration below the preliminary screening levels. Up to seven PAHs were detected in grab groundwater at low concentrations that slightly exceeded the preliminary screening levels. The concentration of several metals in grab groundwater (total and dissolved) exceeded the aquatic SLVs. None of these compounds exceeded the preliminary screening levels for groundwater from well MW-16.

During the February 2008 site visit, a vent pipe was observed on the outside and northern wall of the main building. A subsequent review by the Port of available drawings confirmed the potential presence of a tank in this location. The drawings date from 1959 and were related to the design of the "Main Dock Service Building". Specifically, the drawings indicate a 675-gallon heating oil tank was to be installed approximately five feet north of the center of the building. It is unclear whether the tank was a UST or AST. Preliminary in nature, these drawings do not appear to be as-builts, and it is unclear whether the facility was constructed consistent with the design plans.

No leaks were reported by KMBT, or on the DEQ LUST database relating to these USTs.

5.4 DRUMS AND CONTAINERS

At the time of the site visit, drums containing petroleum products were located in the maintenance building. Some drums stored inside the maintenance building did not have secondary containment. There are no floor drains inside the maintenance building. Drums observed at the subject site appeared to be properly labeled. No spills, leaks, or stains were observed.

5.5 SOLID WASTE

Solid wastes consisting of paper trash, cardboard, and other wastes are placed in dumpsters. Waste Management, Inc. removes the solid waste for disposal at the local landfill.

5.6 WASTEWATER AND SEPTIC SYSTEMS

No septic systems are reported to be in use on the subject site. Sanitary wastewater is discharged to the City of Portland's sanitary sewer system.

Since 2002, KMBT has maintained an individual National Pollution Discharge Elimination System (NPDES) permit for stormwater discharges to the Willamette River at Wheeler Bay (Photo 14).

KMBT has a wastewater treatment system that discharges treated wastewater to the sanitary sewer under a Publicly Owned Treatment Works (POTW) permit. The permit requires pH monitoring and periodic sampling. Soda ash handling associated with KMBT's facility operations result in small amounts of soda ash mixing with storm water runoff and altering the pH. KMBT has installed a wastewater treatment system that diverts soda ash-containing storm water run-off from the dock to a concrete retention basin at the southeast corner of the site (Photo 15). Water is pumped from the retention basin to the maintenance building oil/water separator and then neutralized with sulfuric acid and discharged to the sanitary sewer system. The system utilizes two large steel ASTs mentioned in Section 3.2. KMBT has modified storm water catch basins around the site to include valves and sumps (Photo 16) to divert water to the concrete retention basin for treatment. The modified catch basins also collect water generated during periodic wash-downs of machinery and equipment.

5.7 DRAINS, SUMPS, OR CLARIFIERS

One floor drain was observed inside the maintenance building near the wastewater treatment discharge point, but it had been plugged with concrete (Photo 17). It was unclear whether it discharged directly to the sanitary sewer system, but given the proximity to the wastewater system discharge point, it was most likely plugged when the wastewater system was installed.

One sump was located in the middle of the maintenance building. KMBT pumps standing water, when it accumulates, to the concrete retention basin for treatment.

5.8 PITS, PONDS, OR LAGOONS

One 43,000-gallon concrete retention basin is located at the southeast corner of the site (Photo 15). KMBT diverts storm water run-off and equipment wash-down water to the retention basin for treatment as described in Section 5.6.

5.9 POLYCHLORINATED BIPHENYL (PCB) CONTAINING EQUIPMENT AND ELECTRICAL TRANSFORMERS

The only use of PCBs known to the Port at Terminal 4, was in electrical equipment or fluorescent light ballasts that normally contained PCB oil at that time of use, and as an ingredient for exterior paint on the former Cargill grain tanks at Pier 1. Between 1988 and 1998, PCB-containing electrical equipment at Terminal 4 was replaced and, according to the Port, no PCB-containing equipment remains at Terminal 4. The following lists the equipment, date of removal of PCB-containing transformers from Terminal 4, Pier 4:

SECTION FIVE

Site Reconnaissance

- M-287005 (Serial #C862333) 225 KVA in Crane 357 (Dravo) – Removed by Reidel Environmental Services in August 1988
- M-287018 (Serial #C862942) 500 KVA at Pier 4 – Removed in May 1988 and disposed in March 1990
- M-287019 (Serial #C862941) 1725 KVA at Pier 4 – Removed in June 1989 and disposed in March 1990

URS made the following observations during the site inspection:

- Two PGE-owned pad-mounted transformers were observed near the pit/rail dump building. Both had stickers stating “less than 1 ppm”. Transformers containing less than 5 ppm are classified as “non-PCB” transformers.
- A pad-mounted transformer casing was observed on the east portion of the Port bone yard. No PCB information was available.

No visual evidence of leaks, damage or corrosion was noted on the outside of the transformers observed. If there was a release of a hazardous substance from the transformers, the owner of the transformers, PGE, would be responsible for the remediation of any environmental impacts.

5.10 WELLS

Four groundwater monitoring wells installed as part of the RI were observed on the subject site.

5.11 DISCOLORED/STAINED PAVEMENT OR SOIL, STRESSED VEGETATION, ODORS, TOPOGRAPHIC ANOMALIES

Stained areas at the site were noted on the concrete floor in the storage area for gear oil, lubricating oil, and hydraulic oil drums in the southeast corner of the maintenance building. In the same area was an approximate 500-gallon steel used oil AST with minor staining on the concrete floor. This tank has since been removed.

The hydraulic machinery associated with the pit/rail dump building also had staining on the concrete.

5.12 ADDITIONAL ISSUES

During the reconnaissance of the former scrap metal storage area (bone yard), a slag-like material was noted on the ground surface along the southern portion of the site (Photo 18).

6.0 GOVERNMENT AGENCY INFORMATION**6.1 DATABASE SEARCH**

URS reviewed information gathered from several environmental databases compiled by Environmental Data Resource, Inc. (EDR) in order to evaluate, to the extent possible, whether activities on or near the subject site have the potential to create adverse environmental impacts on the subject site. EDR reviews databases compiled by federal, state, and local government agencies. The complete list of databases searched by EDR is provided in Appendices J and K.

It should be noted that this information is reported as URS received it from EDR, which in turn reports information as it is provided in various government databases. It is not possible for either URS or EDR to verify the accuracy or completeness of information contained in these databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence. A description of the databases searched and the information obtained is described below and summarized in Table 2.

**Table 2
Environmental Database Summary
Kinder Morgan Bulk Terminal Leasehold
Port of Portland Marine Terminal 4
Portland, Oregon**

Type of Database	Description of Database/Effective Date	Radius Searched	Number of Sites Identified
NPL	The National Priorities List identifies uncontrolled or abandoned hazardous waste sites. To appear on the NPL, sites must have met or surpassed a predetermined hazard ranking system score, been chosen as a state's top priority site, pose a significant health or environmental threat, or be a site where the EPA has determined that remedial action is more cost-effective than removal action.	1 mile	1
CORRACTS	Listing of RCRA facilities that are undergoing corrective action. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.	1 mile	1

Table 2
Environmental Database Summary
Kinder Morgan Bulk Terminal Leasehold
Port of Portland Marine Terminal 4
Portland, Oregon

Type of Database	Description of Database/Effective Date	Radius Searched	Number of Sites Identified
CERCLIS	The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database identifies hazardous waste sites that require investigation and possible remedial action to mitigate potential negative impacts on human health or the environment.	0.5 mile	0
RCRA TSD	Resource Conservation & Recovery Act treatment, storage, or disposal (TSD) sites.	0.5 mile	0
RCRA Generators	RCRA-regulated hazardous waste generator notifiers list; both Large Quantity Generators (LQG) and Small Quantity Generators (SQG) are included in this list.	0.25	SQG – 0 LQG – 0
ERNS and state spills list	EPA's Emergency Response Notification System (ERNS) list contains reported spill records of oil and hazardous substances.	Subject property	Subject property
SWLF	State inventory of solid waste disposal and landfill sites.	0.5 mile	0
LUST	List of information pertaining to all reported leaking underground storage tanks.	0.5 mile	5
SHWS	State Hazardous Waste Site (SHWS) listing of information about sites that may be of environmental interest – the State of Oregon equivalent is the Oregon DEQ's Environmental Cleanup Site Information (ECSI) database.	1.0 mile	Subject Property + 26
UST/AST	State registered underground and aboveground storage tank sites listing.	0.25 mile	Subject Property

6.1.1 Subject Property Listings

The subject property was identified by EDR as being listed on four regulatory agency databases:

SHWS – Port of Portland – Terminal 4 is listed on the Environmental Cleanup Site Information (ESCI) System database as a site with historic contamination with several cleanup efforts. The ESCI number for the site is 272 and includes discussion of the KMBT leasehold. A detailed report from DEQ's ESCI database is included in Appendix I. The ESCI report references information relating to the subject site and nearby facilities and does not discuss issues pertaining to the KMBT leasehold, exclusively. The summary below references issues pertaining to the KMBT site only:

Available Port records indicate that pencil pitch was handled at Terminal 4 from 1978 to 1998. Jones Oregon Stevedoring held agreements with the Port to unload pencil pitch at Berths 410 and 411. ^{xv}Jones had the Bulk Cargo Handling pencil pitch contract from July 1, 1980 through June 30, 1981. ^{xvi}, ^{xvii} Jones also had the pencil pitch unloading contract for July 1, 1982 to June 30, 1983. Stevedoring Services of America was the stevedore for 8 pencil pitch vessel unloadings between September 1985 and December 10, 1987. Hall-Buck handled pencil pitch at Berth 411 in Slip 3 from 1988 to 1998. Longshoremen removed the pencil pitch from the ships' holds by means of a clamshell-equipped Dravo unloading tower on Pier 4 and loaded it directly onto truck trailers or railcars adjacent to the pier. Sediment sampling conducted in Slip 3 by Battelle Marine Sciences in December 1988 showed elevated concentrations of PAHs, which were attributed to pencil pitch spills. The sediments in Slip 3 were dredged in December 1994 and January 1995, and confirmatory sediment sampling verified that pencil pitch concentrations were below the maximum allowable concentration of 0.5 percent. Hall-Buck notified the Port in June 1997 of an additional pencil pitch spill in Berth 411, and suction dredging was used in July 1997 to remove the pencil pitch from the submerged riprap area at the southern face of Berth 411. Confirmation sampling showed that the dredging technique was inefficient in cleaning the area outside the riprap, and bucket dredging was utilized in 1998 to complete the cleanup.

Extensive pencil pitch source control work has been conducted since 2004. A Pencil Pitch Investigation Report was submitted to DEQ in 2006 and Phase II Pencil Pitch Investigation Report was submitted in 2007. From these investigations it was determined that PAHs are present in surface soil on the south slip bank area at concentrations that exceed human health RBCs and/or sediment PECs. A Phase I Removal Action was completed from August to October 2008 at Terminal 4 that included the dredging of 12,819 cubic yards of contaminated sediment from slip 3 and the area north of Berth 414, the installation of a near-shore cap to isolate petroleum contaminated sediment, and the capping and stabilization of the banks of Wheeler Bay to isolate contaminants from migrating to the river.

^{xv} 491820 Jones Pitch Handling Agmt (9-26-79), pg 1

^{xvi} POPGPA00103985

^{xvii} POPGPA00103986-87

Currently, a Source Control Measure Alternative Evaluation is being prepared to assess the appropriate source control measure (SCM) to mitigate the potential for the soil to erode into the river. In addition, a Contamination Media Management Plan (CMMP) is in preparation to identify and document the appropriate actions to limit human exposure to this soil.

OR CRL – Port of Portland – Terminal 4 is listed on the Confirmed Release List and Inventory database as having historical spills that has required cleanup. KMBT is referenced in the DEQ ESCI file number 272.

ERNS – Port of Portland – Terminal 4 is listed on the Emergency Response Notification System database which records releases of oil and hazardous substances. KMBT is referenced in the DEQ ESCI file number 272.

UST – Port of Portland – Terminal 4 is listed on the Underground Storage Tank database as having three permitted USTs. The subject site, KMBT, has one permitted UST under DEQ permit number 9786. Information regarding this tank is provided in Section 5.3.

The subject site was also identified by EDR as being listed on several other regulatory agency databases that are classified as supplemental to the ASTM standard.

6.1.2 Off-site Property Listings

The EDR database report identifies off-site facilities that have suspected or documented environmental concerns or Recognized Environmental Conditions that may negatively impact the subject site. The criteria for further evaluating the potential impact of a listed off-site facility are summarized below:

- The listed off-site facility is adjoining to the subject site; or, the listed off-site facility is documented or assumed to be hydrogeologically upgradient and a likely pathway exists for environmentally mobile contaminants to reach the subject site; or, contaminants from the listed off-site facility can reach the subject through other pathways (i.e., surface runoff); and,
- The off-site facility is listed on one of the databases of the Federal NPL, Federal CORRACTS, Federal CERCLIS, Federal ERNS, State LUST, State Deed Restrictions, and State Toxic Pits, Landfill (excluding transfer stations) and is not listed in the database as “closed” or “no further action” (including NFRAP); or,
- The facility adjoins the subject site and is listed as a RCRA large-quantity hazardous waste generator, a CERCLIS NFRAP site, or an UST operator; or
- The facility is a known or suspected concern based on professional judgment or observations made during the site reconnaissance (i.e., dry-cleaning operations that may or may not be listed as RCRA-SQG or a non-adjoining UST site that appears to have a remediation system in-place).

SECTION SIX

Government Agency Information

Summarized below are identified facilities that, using the criteria discussed above, appeared to be of potential concern including EDR's map reference number, site name and address, direction and distance from subject site, type, and an evaluation of the listed site's potential to create a Recognized Environmental Condition on or otherwise impact the subject site.

Of the 26 listed SHWS sites, 9 were eliminated as potential concern because they were on the West side of the Willamette River. Sites that are adjacent, or assumed to be hydrogeologically upgradient are listed and discussed below:

Site: UPRR – St. Johns Tank Farm; DEQ VCP Site #2017
EDR #: A2
Databases: SHWS, OR VCS, LUST
Address: 6908 N Roberts Avenue
Location: Approximately ¼ to ½ mile east-northeast of the subject site.
Concern: Impacts to soil and surface water from oil and other fuel related compounds.
Status: DEQ issued a conditional No Further Action for this property in September 2004. LUST site closed on August 29, 2001.

Site: Crown Cork & Seal Co Plant 87
EDR #: 14
Databases: FINDS, RCRIS-LQG, TRIS, CORRACTS
Address: 10200 N Lombard Street
Location: Approximately ½ to 1 mile east of the subject site.
Concern: The operator has been cited for 17 RCRA violations.
Status: The facility has been assigned a low corrective action priority by the EPA.

Site: Flint Ink Corp.
EDR #: 7
Databases: SHWS, OR HAZMAT
Address: 10653 N Lombard Street
Location: Approximately ½ to 1 mile east of the subject site.
Concern: Petroleum-based black ink has impacted soils. A cleanup has been conducted but moderate levels of hydrocarbons and low levels of copper, chromium, and zinc remain in shallow soils in some areas.
Status: Remedial investigation activities are ongoing.

Site: Port of Portland – Terminal 4, Toyota Auto Storage
EDR #: C8 & 9
Databases: SHWS, LUST, OR CLR
Address: 10400 N Lombard Street
Location: Approximately ½ to 1 mile east of the subject site.
Concern: Several UST leaks from tanks of van fuel (similar to kerosene), and gasoline to subsurface soils.

SECTION SIX

Government Agency Information

Status: DEQ issued a No Further Action letter on 6/11/04 for the ESCI site. DEQ issued a No Further Action letter for the LUST site on June 11, 1988.

Site: Klix Corporation
EDR #: D10
Databases: SHWS, LUST, OR CLR, OR VCS, AUL
Address: 10771 N Lombard Street
Location: Approximately ½ to 1 mile northeast of the subject site.
Concern: Improperly stored drums of hazardous material, a tank of isopropyl alcohol, and disposal of waste to the sanitary sewer impacted soils at the site.
Status: DEQ issued a No Further Action letter for the tank on 1/16/90. DEQ staff determined on 6/11/96 that No Further Action was required for the site under an industrial cleanup scenario. The NFA is contingent upon use of the site remaining industrial.

Site: Chemcentral Portland
EDR #: D11
Databases: RCRIS-SQG, SHWS, FINDS, HSIS, LUST, OR SPILLS, OR CRL, UST, AST CERC-NFRAP, OR VCS
Address: 10821 N Lombard Street
Location: Approximately ½ to 1 mile northeast of the subject site.
Concern: The site stores solvents in approximately 40 USTs and blends the materials to customer specifications. Soil and groundwater sampling revealed chlorinated and aromatic solvents in groundwater at the site.
Status: The site is upgrading its UST network with ASTs and containment bulkheads. Investigations of soil and groundwater are ongoing. Solvents were intermittently detected at low concentrations in a well on Port Property near Lombard.

Site: Borden Inc.
EDR #: 12
Databases: SHWS, CERC-NFRAP
Address: 10915 N Lombard Street
Location: Approximately ½ to 1 mile northeast of the subject site.
Concern: Glue and resin manufacturing is conducted at the site, groundwater from an on-site monitoring well has shown significant impacts of chlorinated and alcohol-based solvents. Little else is known about the site.
Status: The EPA has recommended a medium priority expanded PA (XPA) due to the surrounding area being predominantly industrial and the low risk of groundwater being used.

Site: Boydston Metal Works, Inc.
EDR #: 16
Databases: RCRIS-SQG, SHWS, FINDS, HSIS, AST, AST, FTTS INSP, OR VCS
Address: 9002 N Sever Court
Location: Approximately ½ to 1 mile north-northeast of the subject site.

SECTION SIX

Government Agency Information

Concern: River sediments adjacent to the site contain total organotins, copper, zinc, and antimony. On-site groundwater is contaminated with chlorinated solvents, and soil contains metals, PCBs, and petroleum compounds.

Status: Remedial investigation is ongoing.

Site: Union Carbide Corporation

EDR #: F20

Databases: SHWS, OR CRL

Address: 11920 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Two former scrubber sludge disposal ponds were located at the site with substantial contaminant concentrations, which may be leaching to groundwater. The southern pond also had an outflow to the Columbia Slough where sediments were believed to be impacted. Both ponds were filled by 1987 or 1988. Subsurface petroleum contamination associated with former USTs and ASTs is present on the western parcels. There is surface soil contamination (petroleum and metals) in and near the former processing building, paint storage shed, and palletized waste drums. PCB-contaminated soil and concrete is present at the electrical substation, and a lead-contaminated ash pile is located along the eastern site boundary.

Status: A remedial investigation is ongoing for on-site impacts, DEQ concluded in August 2002, there is no basis for a slough sediment removal action or further investigation at this time.

Site: NW Pipe and Casing Company

EDR #: F21

Databases: SHWS, FINDS

Address: 12005 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Petroleum, chlorinated solvents, PCBs, and PAHs were found in on-site soils. A leaking underground storage tank had caused localized groundwater contamination. Shallow river sediments along the site contained concentrations of the following contaminants that exceeded Portland Harbor Sediment baseline values: antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, nickel, manganese, zinc, butylbenzophthalate and total organotins.

Status: XPA is a high priority, with the XPA report expected in December 2001. NW Pipe to install groundwater monitoring wells in area of chlorinated VOC release to groundwater.

Site: Joseph T. Ryerson & Sons, Inc.

EDR #: F22

Databases: SHWS, FINDS

Address: 9040 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: No information available.

SECTION SIX

Government Agency Information

Status: Preliminary Assessment recommended.

Site: Premier Edible Oils

EDR #: 23

Databases: SHWS, OR CRL, OR VCS

Address: 10400 N Burgard Street

Location: Approximately ½ to 1 mile north of the subject site.

Concern: Groundwater contamination present at this site. Primary contaminants include petroleum hydrocarbons (particularly BTEX and other petroleum-based VOCs). Several well points also contained low levels of chlorinated solvents. Sediments adjacent to the site are impacted by mercury, cobalt, antimony, barium, PAHs, zinc, copper, manganese, arsenic, carbazole, dibenzofuran, methylnaphthalene, and bis(2-ethylhexyl)phthalate. Free-phase petroleum is present on groundwater at the southwest corner of the site and appears to be from historic site operations. Low-level chlorinated solvents, PAHs, and VOCs usually associated with gasoline were detected with the free-phase petroleum.

Status: Groundwater remedial investigation and risk assessment are ongoing.

Site: Jefferson Smurfit

EDR #: 24

Databases: SHWS, OR VCS

Address: 9930 N Burgard Street

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Sediments adjacent to the site contained zinc and total organotins at concentrations more than 50 percent above baseline values.

Status: EPA agreed with DEQ recommendation for no further upland investigation and low environmental priority ranking based on XPA information.

Site: Portland Container Repair Corporation

EDR #: 25

Databases: SHWS, FINDS

Address: 9449 N Burgard Way

Location: Approximately ½ to 1 mile north-northeast of the subject site.

Concern: Sediments adjacent to the site contained total organotins, copper, zinc, and antimony.

Status: Remedial investigation is ongoing.

Site: Rivergate Auto Wrecking – U Pull It Division

EDR #: G29

Databases: SHWS, FINDS

Address: 12104 N Columbia Boulevard

Location: Approximately ½ to 1 mile northeast of the subject site.

Concern: Impacts to soil include: used motor oil and antifreeze, likely gasoline/BTEX and PAHs, possible lead, PCBs, cadmium, chromium, zinc, asbestos, mercury, freon, phthalates, and other auto-associated wastes. EPA SI (June 1999) detected PAHs,

SECTION SIX

Government Agency Information

metals, BTEX, phthalates, ethylene glycol, pesticides, and PCBs. Groundwater may be very shallow at site with possible groundwater contamination.

Status: No Further Remedial Action Planned under EPA.

Site: Pacific Car Crushing
EDR #: G31 & 32
Databases: SHWS, OR HAZMAT, OR CRL
Address: 12122 N Columbia Boulevard
Location: Approximately ½ to 1 mile northeast of the subject site.
Concern: Soils around storm water holding pond saturated with waste oil. Contaminants presumably include automotive-associated hazardous substances (gasoline/BTEX, lead, cadmium, chromium, mercury, PCBs, PAHs, Freon, brake fluid, antifreeze, zinc, copper, asbestos, nickel, phthalates, etc).
Status: Remedial investigation is ongoing.

Site: BPA – St. Johns Substation
EDR #: H33
Databases: SHWS, FINDS
Address: 12567 N Columbia Boulevard
Location: Approximately ½ to 1 mile northeast of the subject site.
Concern: BPA approached DEQ in April 1996 with information about low to moderate levels of several chlorinated solvents in an on-site well that at one time supplied drinking water to employees. The source of the TCA, DCE, and DCA is likely to be past use of chlorinated solvents to clean electrical equipment over bare ground. Additionally, historic spills and releases of dielectric fluids caused significant concentrations of PCBs in shallow soil in many locations of the site.
Status: BPA excavated 342 tons of PCB-contaminated soil, but an evaluation of PCB levels remaining in soils still needs to be conducted as well as on-site characterization of VOCs in groundwater. Further state action at the site is a medium priority.

Site: Mt. Hood Metals, Inc.
EDR #: I35
Databases: SHWS, OR VCS
Address: 9645 N Columbia Boulevard
Location: Approximately ½ to 1 mile east-northeast of the subject site.
Status: *See Union Carbide Corporation; Mt. Hood Metals facility was built on one of the sludge ponds associated with Union Carbide Corporation. Remedial Investigation of the site by both Mt. Hood Metals and Union Carbide is ongoing.

6.1.3 Unmapped or Orphan Sites

The review included EDR's listing of Unmapped Sites, sites that have not been geocoded based on lack of sufficient data regarding their exact location within the general area. The subject site

SECTION SIX

Government Agency Information

was not identified as an Unmapped Site. Thirty-one unmapped sites were identified on the database summary as Unmapped or Orphan Sites; upon closer review, only four of these sites were located within the ASTM-designated radii of the subject site, and using the criteria discussed above, appeared to not be of potential concern. There is no reason to believe that these sites have created a Recognized Environmental Condition on the subject site.

6.2 REGULATORY AGENCY CONTACT

URS contacted government agencies listed below to obtain information regarding contamination, environmental permits, and corrective actions on the subject site.

Oregon Department of Environmental Quality, Northwest Regional Office – Oregon DEQ was contacted for information regarding ECSI and LUST sites at the subject and adjoining properties. Information for the ECSI and LUST sites was reviewed by querying DEQ's online database. A copy of relevant files is included in Appendix L.

Oregon State Fire Marshal –The Oregon State Fire Marshal was not contacted because KMBT provided information related to emergency responses associated with releases of hazardous substances and the storage of chemical products. A Hazardous Substance Information Survey is attached in Appendix M.

Portland Fire Marshal –The Portland Fire Marshal was contacted to obtain information related to emergency responses associated with releases of hazardous substances and the storage of chemical products. The Portland Fire Marshal responded via fax and indicated that in 1992 and 1993 the fire marshal inspected recently installed ASTs, one containing sulfuric acid, and one containing oil. The fax received from the Portland Fire Marshal is included in Appendix M.

7.0 OPINIONS AND CONCLUSIONS**7.1 ON-SITE ENVIRONMENTAL CONCLUSIONS*****Recognized Environmental conditions (REC)***

Based on observations made during the site reconnaissance and other available information, the following Recognized Environmental Conditions were identified:

REC #1: During the February 2008 site visit, a vent pipe was observed on the outside and northern wall of the main building. A subsequent review of Port design drawings from 1959 indicate a 675-gallon heating oil tank was planned for this location.

The T4S3 RI did not indicate the presence of a UST in this area. The nearest soil boring (GP-24) was completed 60 feet southwest of the tank. One soil sample was analyzed for TPH (depth of 16-20 feet) with no detectable TPH-d and 269 mg/kg TPH-o.

The T4S1 RI also did not indicate the presence of a UST in this area. The nearest soil borings were completed 50 feet west (SB-51) and 70 feet southwest (SB-52) of the tank. Soil samples from the 11- to 12-foot depth range did not contain measurable levels of TPH. Grab groundwater samples were collected from each boring and did not contain measureable levels of TPH.

The groundwater results suggest that if any releases occurred they were likely limited to the immediate vicinity of the UST. These borings, however, do not provide direct useful information about potential releases from the UST.

Recommendation: Perform a geophysical survey utilizing ground penetrating radar and magnetic survey devices to verify the possible presence of a UST or UST pit. If such a feature is confirmed then the information should be evaluated for further investigation, if any.

REC #2: The RI report was submitted prior to the completion of the stormwater evaluation. Surface water flow from precipitation and runoff on impervious surfaces is collected in drainage basins with subsequent transport to the Willamette River. Thus, potential surface water and sediment pathways exist.

Recommendation: A storm water and sediment evaluation is currently being undertaken, under DEQ oversight. The Port submitted a March 2009 report "Final – Storm Water Data summary Report, Terminal 4 Slip 1 and Slip 3 Uplands Facilities" to DEQ. Upon completion, the results of stormwater and sediment investigations should also be utilized to assist in determining site baseline conditions.

De Minimis Conditions

The following items, although not included as RECs, were identified during this Baseline Audit as *deminimis* conditions. These items, though they could potentially contribute to contamination on the subject site, are not included as RECs either because the condition is generally considered to pose a low concern, or because insufficient evidence was available to definitively conclude that the condition has resulted in the presence or likely presence of contamination to soil and/or groundwater on the subject site. This includes areas that were investigated as part of the RI and based on an evaluation of analytical test results against regulatory screening levels, DEQ concurred were adequately characterized.

De minimis Condition #1: Pencil pitch was handled at Berth 411 in Slip 3 from 1978 to 1998. Pencil pitch was removed from the ships' holds and loaded directly onto truck trailers or railcars adjacent to the pier.

In 2004 URS recommended that the Port conduct upland soil sampling at Berth 411 to assess the potential impacts from historical pencil pitch spills. This was addressed in the RI (AOC 73 – Berth 411 Pencil Pitch Handling). Surface soil samples (S-8 through S-10) were collected and analyzed for PAHs and PCBs. Additionally, groundwater from well MW-16 was analyzed for PAHs. Low concentrations of PAHs were detected in the surface soil samples. The concentration of benzo(a)pyrene (270 ug/kg) in S-10 slightly exceeded the industrial PRG (210 ug/kg). With the exception of one sampling event (May 2005) at well MW-16, PAHs were not detected above the preliminary screening levels during the quarterly sampling. This exceedance was not observed in the other quarters of monitoring and was determined to likely be related to soil entrained in the samples. PCBs were not detected above the MRLs with the exception of Aroclor 1260 in soil from MW-16. PCBs were not detected above the MRL in groundwater from well MW-16. DEQ concurred that the AOC was adequately characterized for the purposes of the RI and risk assessment.

De minimis Condition #2: The transfer of lead and zinc concentrates at Terminal 4 was relocated to Slip 3. A 2001 report prepared for the Port by URS titled "Terminal 4 – Track 401 Soil Sampling Project" indicates that historic heavy metal ore transfer activities at Terminal 4, north of the subject site along rail segment 401, likely resulted in elevated concentrations of lead in near-surface soil above hazardous waste levels. This was determined to be an Area of Concern in the "Draft Remedial Investigation Work Plan, Port of Portland, Terminal 4 Slip 1 Upland Facility".

This area was subsequently addressed in the RI as AOC 72 (Railroad Alignments). Surface soil samples collected from 0.5 and 1.5 feet bgs (AOC72-S1 through AOC72-S3) were analyzed for TPH, PAHs, and metals. In addition, the 1.5 foot samples from select samples (AOC72-S1 and AOC72-S3) were analyzed for VOCs. Soil samples from approximately 1-foot bgs from borings SB-70 through SB-76 were analyzed for TPH, VOCs, and metals. Grab groundwater from boring SB-70 was analyzed for metals.

TPH was not detected above the MRL in soil. VOCs in soil were generally not detected above

the MRL with the exception of methylene chloride which was below the preliminary screening levels in SB-70 and SB-71. A few PAHs were detected above the MRL in soil from AOC72-S1 at low concentrations that were all below the preliminary screening levels. The concentrations of up to three metals in soil from SB-72, SB-75, and SB-76 exceeded the preliminary screening levels. The concentrations of metals in grab groundwater were low and consistent with the expected background values. DEQ concurred that the AOC was adequately characterized for the purposes of the RI and risk assessment.

De minimis Condition #3: A 1985 Port of Portland Map entitled "Electrical Transformer Locations" depicts a 95-gallon PCB containing oil reservoir associated with the Port's Crane 4357 at Slip 3 Berth 411.

According to Port records, Crane 4357 is the Dravo The 225 KVA transformer M-287005 (Serial #C862333) in Crane 4357 was removed by Reidel Environmental Services in August 1988.

De minimis Condition #4:

A storage area for gear oil, lubricating oil, and hydraulic oil drums was observed in the southeast corner of the maintenance building. A portion of these drums were placed within secondary containment structures, the rest were placed on the maintenance building's concrete floor. Most of the drums were 55-gallon steel or poly drums. Also located in this area was an approximate 500-gallon steel used oil AST. This AST does not have secondary containment. Minor staining was observed on the concrete floor under several drums and the AST.

Recommendation: KMBT to provide secondary containment for all containers of materials.

De minimis Condition #5:

Stationary hydraulic machinery was observed at several locations on site, mainly associated with the pit/rail dump building. Minor staining of concrete ground surfaces was observed as well as absorbent pads that have been placed under and around the machinery. No containment was observed with the machinery.

Recommendation: KMBT to evaluate and maintain machinery on a routine basis to avoid leaks or spills of materials.

7.2 OFF-SITE ENVIRONMENTAL CONCLUSIONS

Recognized Environmental conditions (REC)

REC #3: During the reconnaissance of an area northwest of the subject site that was formerly used by the Port for storing scrap metal, a slag-like material was noted on the ground surface along the southern portion of the property.

Recommendation: Analyze soils below the slag-like material for metals if necessary (i.e. for change in site development) to evaluate the potential for leaching of heavy metals to soils and/or groundwater.

REC # 4: The leasehold is adjacent to and in the vicinity of the Portland Harbor Superfund Site. In or over water releases of hazardous substances, petroleum products and other pollutants are being investigated through an EPA Region 10 supervised RIFS process.

Historical Recognized Environmental conditions (HREC)

HREC #1: The upland soils of the Slipbank area (directly adjacent to the southeast corner of the KMBT leasehold boundary) were investigated in 2006 and 2007 in order to determine if PAHs were present in erodible soils; and to characterize the lateral and vertical extent of the contamination. Sampling identified soils with PAHs concentrations above RBCs and PECs primarily in soils at two feet below ground surface. Ash Creek recommended removal of the contaminated soils, replacing with clean fill and riprap as well as capping with asphalt pavement in the Slipbank area.

Consistent with Ash Creek recommendations of the Phase II Pencil Pitch investigation, removal of contaminated soils and replacement with clean fill along the bank area and pave the upland areas was completed in 2008.

8.0 REFERENCES

References included as an appendix to this report are marked with a “*”

Public Documents

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*Environmental Data Resources (EDR). Supplemental to Site Assessment Report No.01215516.1r., Kinder Morgan Bulk Terminal Leasehold, 11040 N Lombard Terminal 4, P, Portland, OR 97203, June 21, 2004.

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U.S. Geological Survey. 1984. U.S. Geological Survey 7.5-Minute Quadrangle Map, Linnton Oregon.

Port-Provided Documents

Ash Creek Associates, Inc. 2007. Remedial Investigation Report. Terminal 4 Slip 1 Upland Facility, prepared for the Port of Portland, August.

*Century West Engineering Corp. 1995. Port of Portland Tank Management Manual, Marine Terminals Part 1, Site Assessments. January 6.

*PBS Environmental. 2006. Asbestos and Lead-Based Paint Survey Report, Dravo Crane T4 Portland, OR prepared for Port of Portland, December 15.

SECTION EIGHT

References

*The Port of Portland. 1985. *Terminal 4, Electrical Transformer Locations, Site Plan*, Drawing Number T4 85-12.

URS Corporation. 2004. Remedial Investigation Proposal, Port of Portland, Terminal 4 Slip 1 Upland Facility. Prepared for Port of Portland. January 23.

URS Corporation. 2001. Terminal 4 – Track 401 Soil Sampling Project, June.

*Wy'East Laboratory. 2006. *Report #62887 to PBS Environmental*, December 15

Interviews

Mr. Brad Clinefelter, *Terminal Manager, Kinder Morgan Bulk Terminals, Inc.*, (503) 285-2990. June 16, 2004.

Mr. Marco Ullmer, Regional Environmental, Health & safety Manager, Kinder Morgan Bulk Terminals, Inc., (503) 285-4200 x15. June 16, 2004.

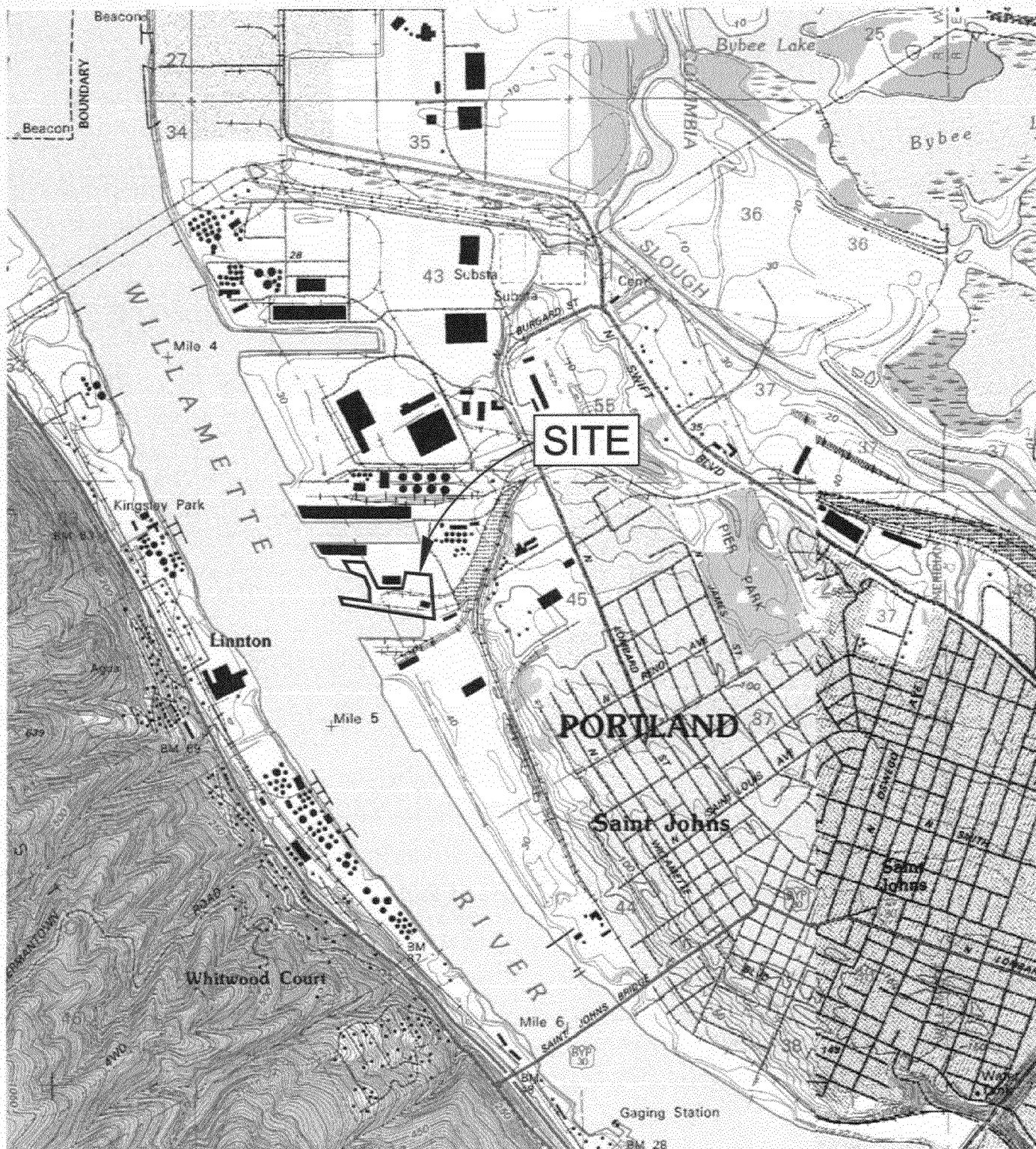
Mr. Phil Ralston, Port Environmental Project Manager, Port of Portland, (503) 240-2011. June 16, 2004.

Mr. David Breen, Port Environmental Project Manager, Port of Portland, (503) 240-2011. October 18, 2007.

Mr. Brent McMullen, *Terminal Manager, Kinder Morgan Bulk Terminals, Inc.*, (360) 693-5300. December 5, 2007.

Ms. Jennifer Fonseca-Littrell, *Port Property Management Administrator*, (503)-240-2013, December 3, 2007.

FIGURES



SOURCE: PORTLAND, OREGON USGS 7.5 MINUTE QUADRANGLE, 1990
 LINNTON, OREGON USGS 7.5 MINUTE QUADRANGLE, 1990.

0 2,000 4,000
 APPROX. SCALE IN FEET

URS

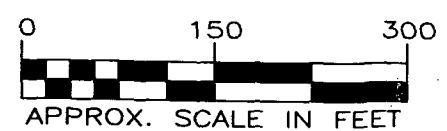
MARCH 2008
 25696598

VICINITY MAP
 KINDER MORGAN
 BULK TERMINAL LEASEHOLD
 MARINE TERMINAL 4
 PORTLAND, OREGON

FIGURE 1

C:\25696598 Pop Kinder Morgan ESA\000 Deliverables\CAU\FIGURE 2.dwg Feb 25, 2008 - 3:18pm

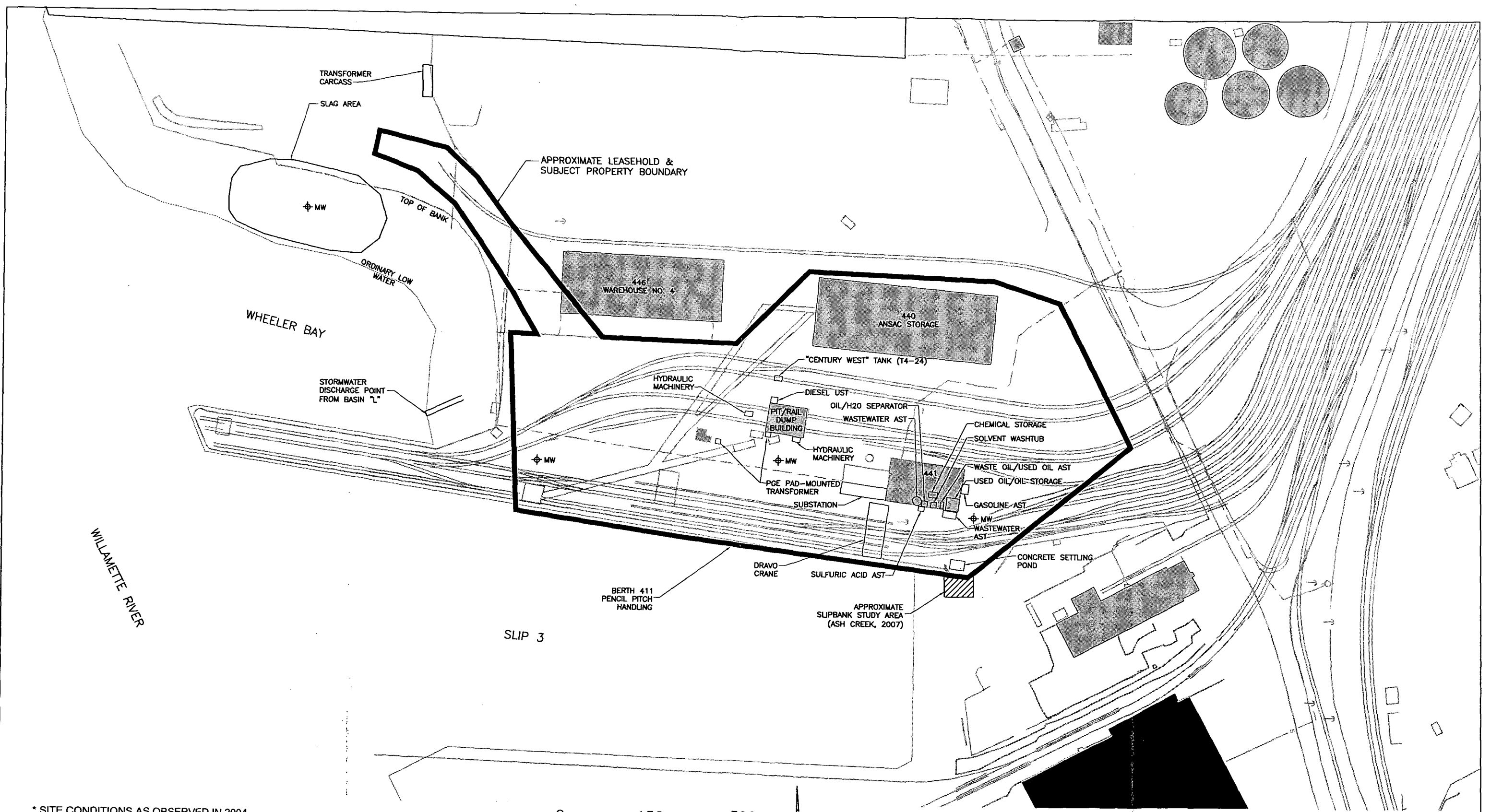
* SITE CONDITIONS AS OBSERVED IN 2004



MARCH 2008
25696598

SITE MAP
KINDER MORGAN
BULK TERMINAL LEASEHOLD
MARINE TERMINAL 4
PORTLAND, OREGON

FIGURE 2



Appendix A

**Terminal 4, Electrical Transformer Locations, Site Plan, Drawing Number T4 85-12
(The Port of Portland, 1985)**

URS

TANK NUMBER T4-24

Location: Hall-Buck, Rail Dump Bld.

Description: 10,000-gallon: UST

Status: Probable Decommission by Removal, Tenant-Owned

Comments: Hall-Buck indicated to Fay Malloy of the Port that is was replaced by T4-43. No other independent documentation exists for this tank.

Reference:

Port of Portland:

Drawing: M86-4 8/10

TANK NUMBER T4-43

Location: Hall-Buck, North of Rail-Dump Building

Description: 5,000-gallons: Diesel; Fiberglass UST; Pressure System; Piping
Length \approx 10 feet.

Status: Active, Tenant-Owned

Registration: This tank is registered with the state under DEQ file number 9786.

Leak Detection:

Tank: The tank has interstitial leak detection equipment. It is currently in compliance with DEQ and Federal regulations.

Piping: The pressure system piping does not have any leak detection equipment. It is out of compliance with DEQ and Federal regulations which required leak detection in 1990.

Corrosion Protection:

Tank: The tank is exempt because it is made of fiberglass.

Piping: The piping does not have any corrosion protection. Corrosion protection will be required by December 1998.

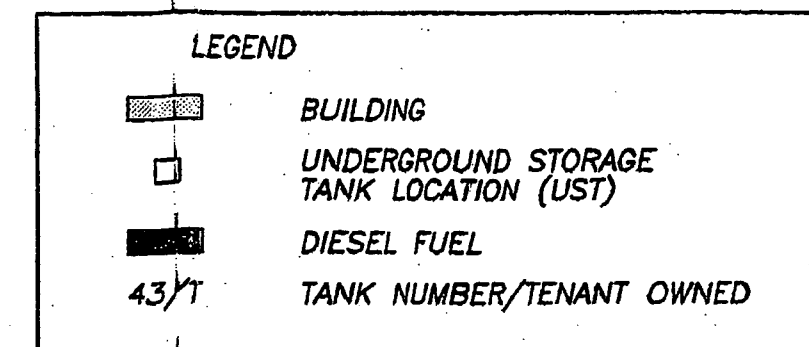
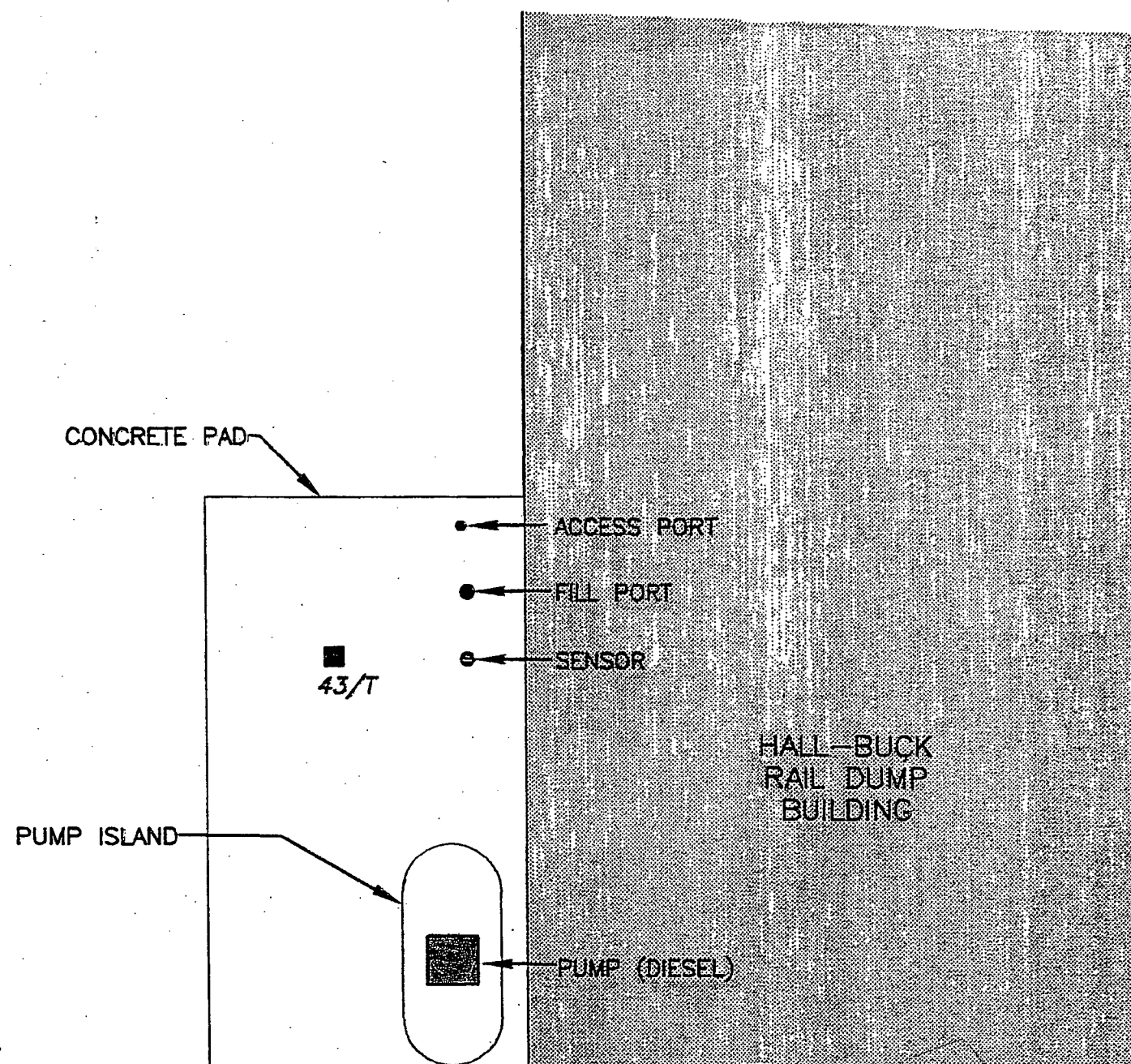
Spill/Overfill: There is no spill or overfill protection on the tank. Spill and overfill protection will be required by December 1998.

Upgrade: The tank is exempt because it is made of fiberglass.

References:

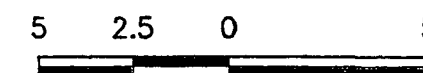
Department of Environmental Quality:

Registered UST File Number: 9786




NOTES:

1. RED JACKET PUMP
2. 3 WALL TANK
3. LEAK DETECTORS
4. VAPOR MONITOR
5. FIBERGLASS UST



SCALE IN FEET
Confidential, Distribution, & Use Restricted

DESIGNED BY: GL	SCALE: AS SHOWN
DRAWN BY : LDM	DATE : 02/21/94
CHECKED BY : 	FILE :
PROJECT NO.: 4003804301-4004	

 **centurywest**
ENGINEERING CORPORATION

 **PORT OF PORTLAND**
PORTLAND, OREGON

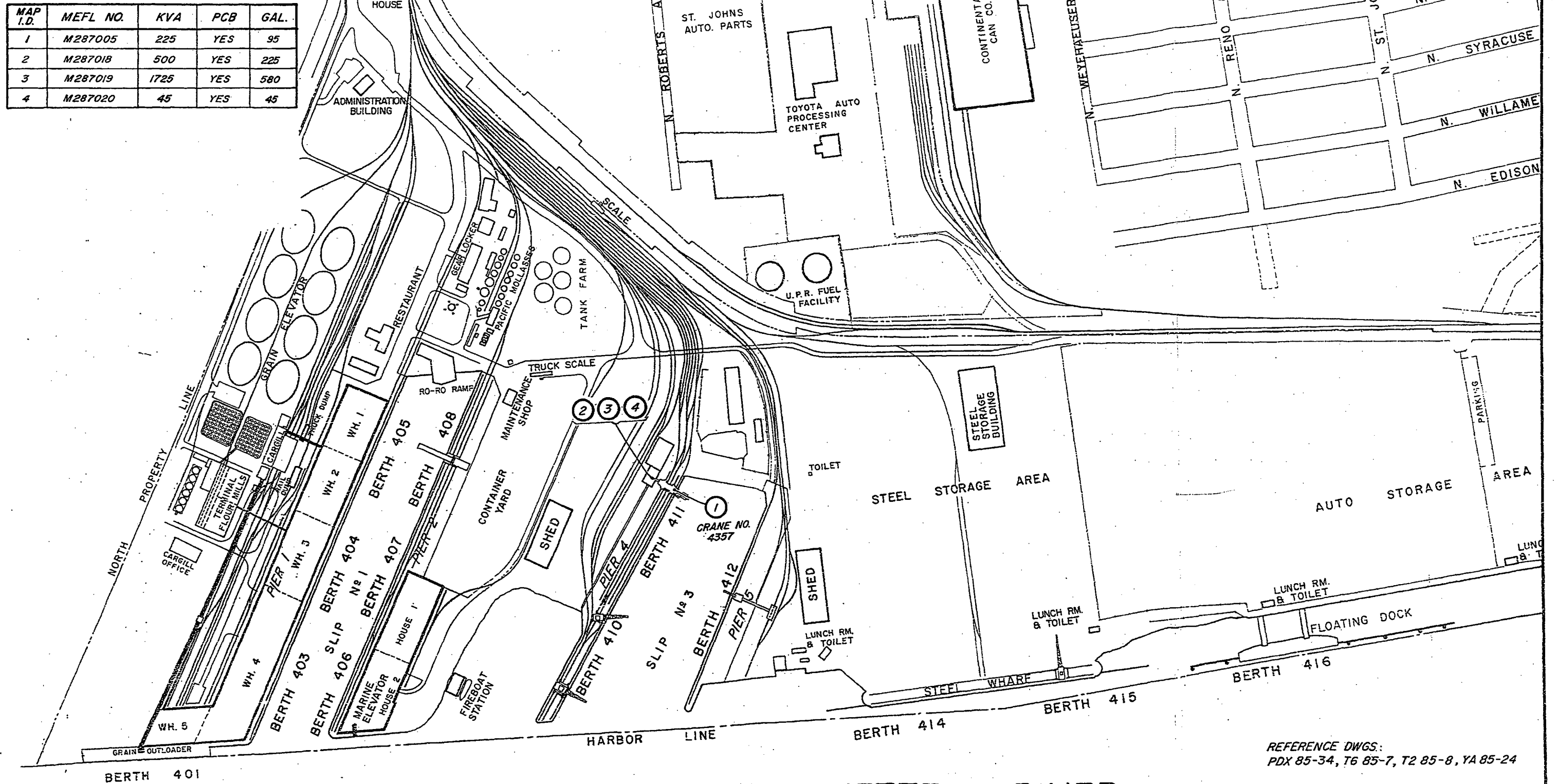
**TERMINAL 4
HALL BUCK
TANK 43/T**

FIGURE
T4-14/16

Appendix B

**Tank Management Manual-Marine Terminal 4
(Century West Engineering Corporation, 1995)**

URS



WILLAMETTE RIVER

REFERENCE DWGS:
PDX 85-34, T6 85-7, T2 85-8, YA 85-24

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[illegible]

THE PORT OF PORTLAND
PORTLAND, OREGON

Z. N. Weber
PROJECT MANAGER

DESIGNED BY R. BOYLES
DRAWN BY V. NGUYEN
CHECKED BY J. SABIN
DATE JULY, 1965

TERMINAL 4

ELECTRICAL TRANSFORMER LOCATIONS

SITE PLAN

SUBMITTED BY R. Helman
MANAGER TECHNICAL SERVICES

DRAWING NO. T4 85-12 1/1

DISCLAIMER: Due to processing, this document may not accurately represent the original document.

Appendix C

Asbestos and Lead Based Paint Survey Report (PBS, December 2006)

URS



Asbestos and Lead-Based Paint Survey Report

Dravo Crane

Terminal 4

Portland, OR

prepared for:

Port of Portland



General Information	1.1
Inspection Summary	1.2
Sample Inventories	2.1
Laboratory Data	Not Numbered
AHERA Certificates	Not Numbered

December 2006
Project #: 15700.066 Task 0001

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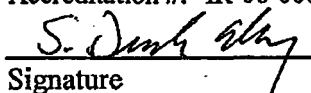
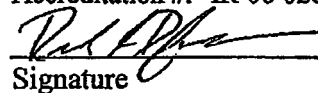
GENERAL INFORMATION**BUILDING DATA**Dravo Crane
Terminal 4
Portland, OR**CLIENT DATA**Port of Portland
PO Box 3529
Portland, OR 97208**SURVEY SCOPE**

PBS Engineering and Environmental has performed a pre-demolition asbestos survey of accessible building areas in accordance with OSHA in 29 CFR 1910.1001 and compiled a report with the following information:

- The type, location and approximate quantity of suspect asbestos-containing materials;
- Bulk sampling of selected suspect building materials;
- Laboratory analytical data of bulk materials sampled

PBS endeavored to locate all the suspect asbestos-containing materials in the crane; however, suspect asbestos-containing materials may be present concealed within wall, ceiling, or floor spaces. If suspect materials are uncovered during demolition activities that are not identified in this report, testing should be performed prior to impact.

PBS has conducted a physical inspection of the crane, compiled this report consistent with the survey scope, and certifies that the information is correct and accurate within the standards of professional quality and contractual obligations.

Derek May
Project Manager
Accreditation #: IR-06-0009A
Signature Date 12/15/06Rich Dufresne
Prime Inspector
Accreditation #: IR-06-0264A
Signature Date 12/15/06

INSPECTION SUMMARY

DATES	SURVEYED BY	ACTIVITY
12/1/2006	Rich Dufresne	Inspect and sample

PBS Engineering and Environmental has investigated accessible areas inside of the building(s) to locate suspect asbestos-containing building materials (ACBM). Suspect materials may be present in concealed areas (e.g. behind walls and under carpet). The findings are listed below.

ASBESTOS MATERIALS

The following materials either tested positive, or, based on the experience of PBS field personnel, were not tested and should be considered asbestos-containing. Materials that had mixed results are considered positive. Materials not sampled may not contain asbestos and should be tested to verify asbestos content prior to impact through demolition, renovation, etc.
(+) Tested Positive, (M) Mixed Results, (P) Presumed Positive, (T) Previously Tested Positive.

<u>Result</u>	<u>Material (type)</u>	<u>Location</u>	<u>Approx. Quantity</u>
(+)	Wall Panel Coating	Mechanical house walls	5,000 SF
(+)	Brake and Clutch Pads	Winch motor brakes	20 EA
(+)	Electrical Components	Mechanical house, electrical cabinets	200 EA

MATERIALS WHICH TESTED NEGATIVE FOR ASBESTOS

The following materials tested negative based on ASHARA sampling minimums and testing by NVLAP participating laboratories. Although no asbestos was detected, it is possible that further sampling could indicate asbestos content. It may be prudent to test prior to impact through demolition, renovation, etc.

<u>Material (type)</u>	<u>Location</u>
Asbestos Insulated Wiring	Throughout

INSPECTION SUMMARY

BACKGROUND

On December 1, 2006 PBS Engineering and Environmental performed a pre-demolition hazardous materials survey of the Dravo Crane located at Terminal 4 at the Port of Portland in Portland, Oregon. The purpose of the investigation was to identify asbestos-containing building materials, lead paint and other hazardous materials that may be impacted by the proposed demolition of the structure. The following is a summary of our findings.

ASBESTOS SUMMARY

An asbestos-containing brown fibrous coating was observed on the metal corrugated walls of the mechanical house. The material is non-friable in its current state, but may become friable if disturbed. The wall panels should be removed, with the material intact, and properly disposed.

Asbestos-containing brake pads were identified at the ground level on wheel motors and at the mechanical landing on the crane winch motors. The brake pads are non-friable and in good condition.

Electrical components including mounting boards, switch housings, heat sinks, and other items in the mechanical house contain asbestos. The electrical components should be disassembled and the asbestos-containing items disposed of prior to demolishing the crane.

The quantities given for the materials listed in this report are the quantities that were observed. Additional quantities may be discovered during disassembly of the crane or it's mechanical systems.

REGULATORY ISSUES (ASBESTOS)

In 1994 Oregon-OSHA adopted federal regulations governing asbestos, (29 CFR Part 1926.1101). These regulations have made significant changes in work procedures and how asbestos materials are removed. OSHA believes that the single biggest problem is to workers who unknowingly or improperly disturb asbestos-containing materials (ACM). Hazard communication, training, personal protection, work practices, exposure monitoring and record keeping are all major components of the regulation. Oregon Administrative Rules-340, Division 32 and 33 also covers asbestos abatement requirements, removal notifications, licensing and certifications for contractors.

- Documents of reference for the removal of asbestos-containing materials:

1. Oregon Occupational Safety and Health Administration (OAR-437, 1926.1101 asbestos)
2. Department of Environmental Quality (OAR-340, Division 248)

LEAD-BASED PAINT

Representative paint chip samples were collected from the Dravo crane. The samples were

INSPECTION SUMMARY

submitted to a qualified lab and analyzed for lead by flame atomic absorption (FLAA).

Paint on metal components revealed lead concentrations ranging from 11,600 to 31,500 parts per million (ppm). The paint on the Dravo is peeling and in poor condition.

REGULATORY ISSUES (LEAD-BASED PAINT)

Oregon OSHA adopted the Federal OSHA lead-in-construction standard (29 CFR 1926.62) in November of 1993 under OAR 437 Division 3-001. The OR-OSHA standards outline worker exposure limits, personal protection requirements, and employer responsibility for exposure assessment, training, housekeeping and recordkeeping. OSHA's lead standard applies to all work where employees may be exposed to lead in construction, alteration, or repair. This includes renovation or demolition of structures where lead-containing materials are present.

Disposal of building demolition waste coated with lead-based paint will generally not require a hazardous waste determinations (i.e., TCLP testing) if demolition debris is disposed of at a solid waste landfill that is permitted by DEQ and which meets the current design standards for municipal solid waste disposal facilities of 40 CFR Part 258.

Reference the DEQ's hazardous waste reduction policy and follow all requirements under the Oregon DEQ, Management of Building Demolition Waste, 97-002 for proper disposal of lead-based painted demolition waste.

8 RCRA METALS

One paint sample from the Dravo was analyzed for 8 regulated RCRA metals. The sample was collected from the major painted structural components. The following table lists the findings in parts per million.

Ag	As	Ba	Cd	Cr	Hg	Pb	Se
ND	ND	71	ND	11,000	ND	348,000	ND

OTHER POTENTIAL ENVIRONMENTAL HAZARDS

Many of the Dravo Crane's systems are hydraulic driven. Hydraulic fluids are present throughout the crane. The fluids should be reclaimed and recycled prior to demolition of the crane.

The upper mechanical house is littered with a large quantity of pigeon excrement. The pigeon waste can pose a respiratory hazard for those working around it. Properly trained personnel using appropriate personal protection equipment should remove the waste. An alternate would be to require all personnel working in the mechanical house to use appropriate personal protection equipment during demolition.

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Lab</u>
15700.066-0001	Brake and Clutch Pads	Ground level; brake pads Analysis: 24% Chrysotile (Cementitious, black)	Lab Cor
15700.066-0002	Electrical Mounting Board	Lower level; electrical box; electrical mounting board Analysis: No Asbestos Detected (Compacted fibers, brown)	Lab Cor
15700.066-0003	Wall Panel Coating	Upper mechanical level; paint and wall panel Analysis: 40% Chrysotile (Fibrous material, brown) No Asbestos Detected (Paint like material, blue)	Lab Cor
15700.066-0004	Wall Panel Coating	Upper mechanical level; paint and wall panel Analysis: 40% Chrysotile (Fibrous material, brown) No Asbestos Detected (Paint like material, blue)	Lab Cor
15700.066-0005	Electrical Components	Upper mechanical level; electrical components Analysis: 22% Chrysotile (Cementitious, grey)	Lab Cor
15700.066-0006	Electrical Components	Upper mechanical level; electrical components Analysis: 20% Chrysotile (Cementitious, grey)	Lab Cor
15700.066-0007	Electrical Mounting Board	Upper mechanical level; electrical mounting board Analysis: 30% Chrysotile (Cementitious, black)	Lab Cor

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Lab</u>
15700.066-0008	Asbestos Insulated Wiring	Upper mechanical level Analysis: No Asbestos Detected (Compacted fibers, brown)	
15700.066-0009	Asbestos Insulated Wiring	Upper mechanical level Analysis: No Asbestos Detected (Compacted fibers, brown)	

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Ave
Portland, OR 97239

Report Number: 060814R01
Report Date: 12/05/2006

P.O. No: n/a

Job Number: 060814

Project Name:

Project Number: 15700.066

Project Notes:

Client Sample ID: 15700.066-0001	Sample ID: S1	Date Analyzed: 12/05/2006
Client Sample Description:	Analyst: Darvey Santner	
Asbestos Mineral Fibers	Percent of Sample:	Percent Asbestos:
	Chrysotile Amosite Crocidolite	
Homogeneous		
cementitious, black	100 % 24 %	24 %
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other	Matrix
		76 %

Client Sample ID: 15700.066-0002	Sample ID: S2	Date Analyzed: 12/05/2006
Client Sample Description:	Analyst: Darvey Santner	
Asbestos Mineral Fibers	Percent of Sample:	Percent Asbestos:
	Chrysotile Amosite Crocidolite	
Homogeneous		
compacted fibers, brown	100 %	NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other	Matrix
	100 %	

Client Sample ID: 15700.066-0003	Sample ID: S3	Date Analyzed: 12/05/2006
Client Sample Description:	Analyst: Darvey Santner	
Asbestos Mineral Fibers	Percent of Sample:	Percent Asbestos:
	Chrysotile Amosite Crocidolite	
Layer 01		
fibrous material, brown	65 % 40 %	40 %
Layer 02		
paint-like material, blue	35 %	NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other	Matrix
Layer 01		60 %
Layer 02		100 %

Client Sample ID: 15700.066-0004	Sample ID: S4	Date Analyzed: 12/05/2006
Client Sample Description:	Analyst: Darvey Santner	
Asbestos Mineral Fibers	Percent of Sample:	Percent Asbestos:
	Chrysotile Amosite Crocidolite	
Layer 01		
fibrous material, brown	70 % 40 %	40 %
Layer 02		
paint-like material, blue	30 %	NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other	Matrix
Layer 01		60 %
Layer 02		100 %

Asbestos and Environmental Analysis

Job Number: 060814

Report Number: 060814R01

Report Date: 12/05/2006

Client Sample ID: 15700.066-0005 Sample ID: S5 Date Analyzed: 12/05/2006
Client Sample Description: Analyst: Darvey Santner
Asbestos Mineral Fibers Percent of Sample: Chrysotile Amosite Crocidolite Percent Asbestos:
Homogeneous cementitious, grey 100 % 22 % - - 22 %
Other Fibers Fibrous Glass Cellulose Mineral Wool Synthetic Other Matrix
78 %

Client Sample ID: 15700.066-0006 Sample ID: S6 Date Analyzed: 12/05/2006
Client Sample Description: Analyst: Darvey Santner
Asbestos Mineral Fibers Percent of Sample: Chrysotile Amosite Crocidolite Percent Asbestos:
Homogeneous cementitious, grey 100 % 20 % - - 20 %
Other Fibers Fibrous Glass Cellulose Mineral Wool Synthetic Other Matrix
80 %

Client Sample ID: 15700.066-0007 Sample ID: S7 Date Analyzed: 12/05/2006
Client Sample Description: Analyst: Darvey Santner
Asbestos Mineral Fibers Percent of Sample: Chrysotile Amosite Crocidolite Percent Asbestos:
Homogeneous cementitious, black 100 % 30 % - - 30 %
Other Fibers Fibrous Glass Cellulose Mineral Wool Synthetic Other Matrix
70 %

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).
Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected.
Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.
Asbestos detection interferences may result from material binders.
Qualitative and quantitative TEM analysis may be recommended for difficult samples.
Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.
The following estimate of error for this method by visual estimation of asbestos percent are as follows:
1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.
This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by: 



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 15700.066 Task 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: December 05, 2006

PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 503.248.0223

Tamara Anderson

Name

Tamara Anderson

Authorized Signature

12.5.06

Date

RECEIVER

Date Received:

12/5/06 9:45am

Company: Lab Cor

Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

Darvey Sanchez

Name

[Signature]

Authorized Signature

12/5/06

Date

Sender's ID No.

Brief Description

Receiver's ID No.

15700.066-0001

15700.066-0002

15700.066-0003

15700.066-0004

15700.066-0005

15700.066-0006

15700.066-0007

Please analyze the enclosed 7 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed. Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: 48 Hour

SPECIAL INSTRUCTIONS:

RD



Wy'East Environmental Sciences, Inc.

LABORATORY REPORT

PBS Environmental
Attn: Tamara Anderson
4412 SW Corbett
Portland, OR 97201

PROJECT NAME/SITE: REPORT NUMBER: 62887
PROJECT NUMBER: 15700.066 REPORT DATE: 12-12-06
EXTRACTION DATE: 12-7-06 to 12-11-06 PAGE: 1 of 1

AOAC 974.02

Analyte: Total Lead (Pb) in paint chips quantification by FLAA

Field ID	Lab ID	Quantification mg/Kg (ppm)	Detection Limit mg/Kg (ppm)
-1001	R6089	30,000	50
-1002	R6090	11,600	67
-1003	R6091	16,600	57
-1004	R6092	19,800	57
-1005	R6093	31,500	57
BLANK	-	ND	

ND = Not Detected (below reporting limit or detection limit)

TOTAL 8: Quantitation of 8 Metals in Paint

Digestion: EPA 3050

Analysis: EPA 200.8: Silver (Ag), Arsenic (As), Barium (Ba), Cadmium (Cd),
Chromium (Cr), Mercury (Hg), Lead (Pb), Selenium (Se),

All concentrations listed in mg/Kg (ppm)

Field ID / Lab ID	Ag	As	Ba	Cd	Cr	Hg	Pb	Se
-2001 / R6094	ND	ND	71	ND	11,000	ND	348,000	ND
BLANK	ND	ND	ND	ND	ND	ND	ND	ND
Detection Limit	12	12	12	12	12	12	12	12

ND = Not Detected (below reporting limit or detection limit)

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB15700.066-1001	Paint	30,000 ppm	Crane at wheels; base; metal; yellow; peeling	WyEast Environ.
LB15700.066-1002	Paint	11,600 ppm	Crane at support; beam; metal; yellow; peeling	WyEast Environ.
LB15700.066-1003	Paint	16,600 ppm	Crane at mechanical room; wall; asbestos; blue; peeling	WyEast Environ.
LB15700.066-1004	Paint	19,800 ppm	Crane at boom; boom; metal; yellow; peeling	WyEast Environ.
LB15700.066-1005	Paint	31,500 ppm	Crane; boom; metal; yellow; peeling	WyEast Environ.

THIS IS TO CERTIFY THAT

RICH A. DUFRESNE

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 04/13/2006

Course Location: Portland, OR

Certificate: IR-06-0264A



Expiration Date: 04/13/2007

AHERA is the Asbestos Hazard Emergency
Response Act enacting Title II of Toxic Substance
Control Act (TSCA)

For verification of the authenticity of this
certificate contact: PBS Environmental
4412 SW Corbett Avenue, Portland, OR 97239
(503) 248-1939


David Stover, Director of Training

Appendix D

Report #62887 to PBS Environmental (wy'east, 2006)

URS

Lead correction lab.txt

From: Rich Dufresne [rich_dufresne@pbsenv.com]

Sent: Monday, October 01, 2007 4:06 PM

To: Fonseca-Littrell, Jenifer

Subject: Chain of Custody

Attachments: 20071001153729450.pdf; corrected report.pdf

Jenifer-

Attached is a scan of the Chain of custody for the 8 RCRA metals sample from the Drave Crane. That sample is submitted on the same chain of custody as the lead samples.

I spoke with the lab regarding the discrepancy in the lead concentration and they found a mathematical error. The corrected lead concentration by ICP is 26,200 ppm. A corrected lab report is also attached.

DISCLAIMER:

This message and any attachments are considered privileged and confidential and are intended for the sole use of the individual or entity to whom the message is addressed. If you have received this message in error, please immediately advise the sender and permanently delete the message and any attachments.

Wy'East*Wy'East Environmental Sciences, Inc.***LABORATORY REPORT**

PBS Environmental
 Attn: Rich Dufresne
 4412 SW Corbett
 Portland, OR 97201

PROJECT NAME/SITE:
PROJECT NUMBER: 15700.066
EXTRACTION DATE: 12-7-06 to 12-14-06

REPORT NUMBER: 62887
REPORT DATE: 12-15-06
PAGE: 1 of 1

AOAC 974.02

Analyte: Total Lead (Pb) in paint chips quantification by FLAA

Field ID	Lab ID	Quantification mg/Kg (ppm)	Detection Limit mg/Kg (ppm)
-1001	R6089	30,000	50
-1002	R6090	11,600	67
-1003	R6091	16,600	57
-1004	R6092	19,800	57
-1005	R6093	31,500	57
BLANK	-	ND	

ND = Not Detected (below reporting limit or detection limit)

TOTAL 8: Quantitation of 8 Metals in Paint

Digestion: EPA 3050

Analysis: EPA 200.8: Silver (Ag), Arsenic (As), Barium (Ba), Cadmium (Cd),
 Chromium (Cr), Mercury (Hg), Lead (Pb), Selenium (Se),

All concentrations listed in mg/Kg (ppm)

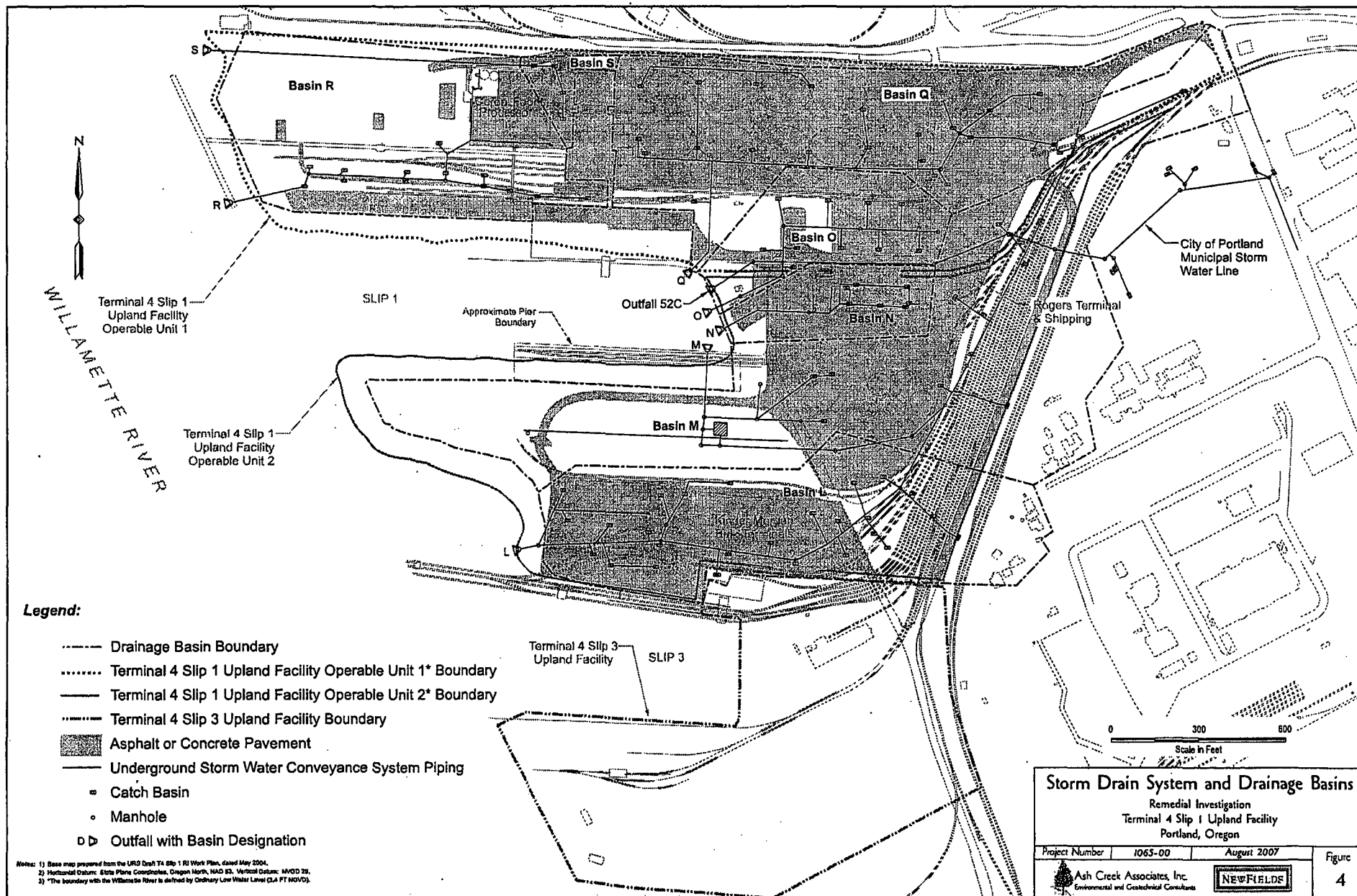
Field ID / Lab ID	Ag	As	Ba	Cd	Cr	Hg	Pb	Se
-2001 / R6094	ND	ND	71	ND	11,000	ND	26,200	ND
BLANK	ND	ND	ND	ND	ND	ND	ND	ND
Detection Limit	12	12	12	12	12	12	150	12

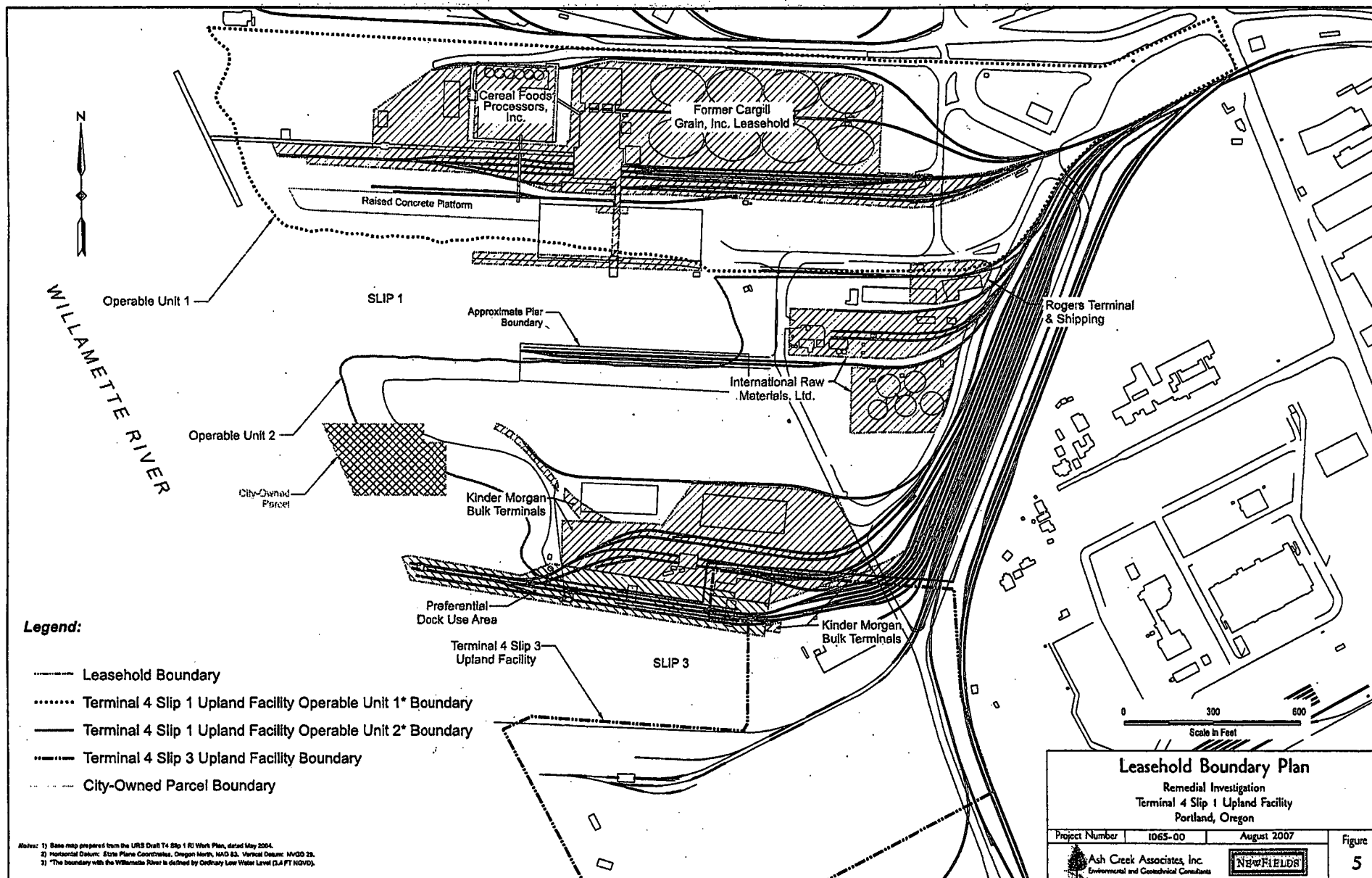
ND = Not Detected (below reporting limit or detection limit)

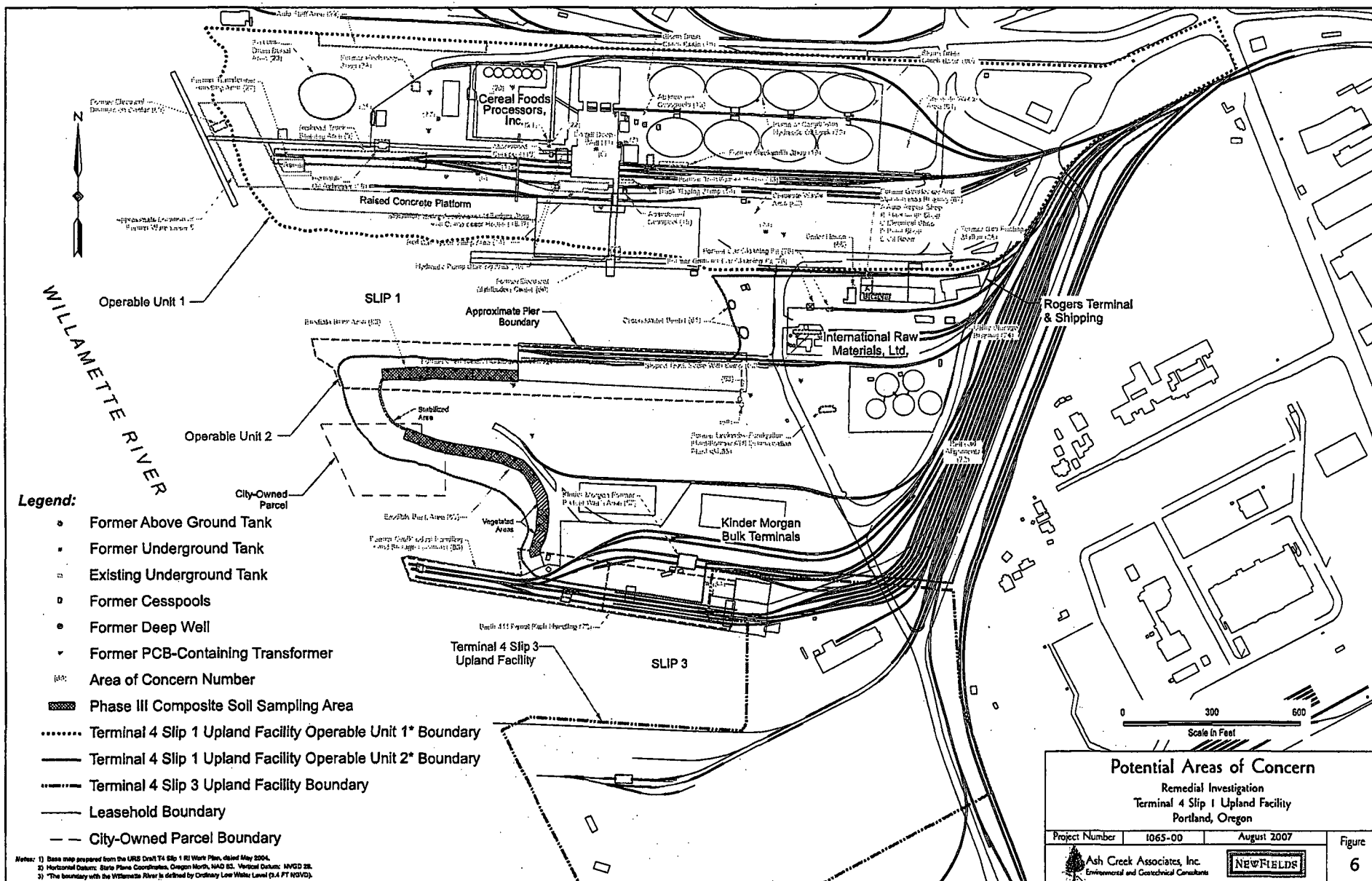
Appendix E

Terminal 4 Uplands Remedial Investigation (Ash Creek, 2006)

URS







Appendix F
Tank Documents From KMBT

URS

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390



UNDERGROUND STORAGE TANK PROGRAM
**GENERAL PERMIT REGISTRATION
CERTIFICATE TO OPERATE**

ISSUED TO:

Brad Clinefeller
Kinder Morgan Bulk Terminals, Inc.
Terminal 4 Pier 4
Portland, OR 97283

TANK OWNER:

Hail-Buck Marine Inc

PERMITTEE:

Brad Clinefeller

REGISTRATION CERTIFICATE

NUMBER: 26-9786-1998-OPER

FACILITY NAME AND LOCATION:

PORTLAND BULK TERMINAL
TERMINAL 4 PIER 4
PORTLAND, OR 97283

REGISTRATION TYPE: Operate
Regulated Substance Delivery Authorized

TANK PERMIT NO:

AJBBH

TANK ID NO:

1

TANK SIZE:

5,000 gallons

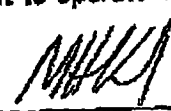
TANK CONTENTS:

Empty

Issued in accordance with the provisions of ORS Chapter 466, 706 to 466.835, 466.994 and 466.995 and OAR 340-150-0001 to -0166 and ORS 465.200 to 465.455 and 465.990 and OAR 340-122-0205 to -0360.

The Oregon Department of Environmental Quality issues this registration certificate with the understanding that the permittee will operate in accordance with the conditions and requirements of the general permit to operate an underground storage tank pursuant to OAR 340-150-0163. This registration certificate remains valid until such time as a modified registration form is received by the department or the department suspends or revokes the registration certificate. Certificates may be suspended or revoked for failure by the permittee to comply with the conditions and requirements of the general permit to operate or applicable statutes or rules.

ISSUE DATE: 12/5/98


Michael H. Korten Hof, Manager
UST Compliance and Cleanup Program
Waste Management and Cleanup Division

Skene - Pizko - 229-6652

Regulated Substance Delivery Authorized

DEC-03-2007 MON 02:58 PM
DEC-03-2007 MON 03:35 PM Kinder Morgan T4

FAX NO. 5032854467

P. 003
P. 03

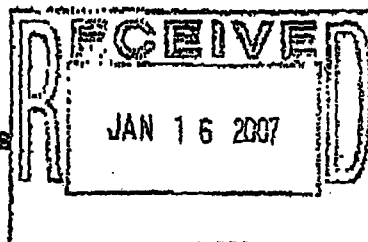
Mar 7-1 to DEQ in K Check 1-17-07



State of Oregon
Department of Environmental Quality

INVOICE

2007 ANNUAL FEE FOR UNDERGROUND STORAGE TANKS



For information about this invoice, please contact Dawn Gomez:
(503) 229-5512 or toll free in Oregon (800) 452-4011
(TTY) (503) 229-8993

To: Brad Clinefelter

Kinder Morgan Bulk Terminal, Inc.

PO Box 83838

Portland, OR 97283-0838

04360D18	6402	730115	9800
A/U	R/C	Acct	T.O.C.
Activity	Sub	Phase	Task
UST - Decommission	Permit	Renewal	# 85.00
Description	Amount		
10202	6-17-07		
Approval ID	Date		
Approval			

Invoice Number: UST07-01525
Invoice Date: 01/09/2007
Invoice Due Date: 02/23/2007

Facility Number: 9786
KINDER MORGAN BULK TERMINAL
4140 N LOMBARD ST
PORTLAND, OR 97203

Operating Certificate Number: 25-5750-1986-OPEN

Tank Numbers	Description	Fee Amount
	1 Tank(s) at \$85.00 ea =	\$85.00

AJB9H

AMOUNT DUE: \$85.00

- The annual UST compliance fee for 2007 is \$85 per tank compartment. Even if the tank is out of use the \$85 fee is owed each year until the tank is permanently decommissioned. This fee was established by the 2001 Oregon State Legislature.
- Tanks are not permanently decommissioned until the Department has received the UST Decommissioning Checklist and Site Assessment Report which is due within 30 days after decommissioning.
- This invoice must be paid by the due date shown. If the fee is not paid the operating certificate may be terminated. In order to receive fuel deliveries in the State of Oregon, you must have a valid operating certificate.
- A late fee of \$35.00 will be applied to the unpaid balance if full payment is not received by the due date.
- Every facility that dispenses fuel to a vehicle or container must have a trained UST System Operator.
- Please complete and sign the enclosed Financial Responsibility Certification and return it with your invoice.
- Please leave a message on the toll free in Oregon UST HELPLINE (1-800-742-7878) if you would like to discuss UST program issues. Your call will be returned by the next business day. If you are calling from outside of Oregon please contact Steve Paiko at (503) 229-6652.

Remit and make checks payable to:

Dept. of Environmental Quality
Attn: Business Office
811 SW Sixth Avenue
Portland, OR 97204-1390

Facility Name: KINDER MORGAN BULK TERMINAL
Facility Number: 9786
Address ID: 389366

Check box if your address has changed and complete back of invoice: ☐

Check box if the facility has been sold and complete back of invoice: ☐

Invoice Due Date: 02/23/2007
Amount Due: \$85.00

Invoice Number: UST07-01525

Amount Enclosed:

Please enclose your financial responsibility certification with this invoice.

KM PBT-4 Rec'd 6-15-07 BT



Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

Western Region Coos Bay Office

381 North 2nd Street

Coos Bay, OR 97420

(541) 269-2721

FAX (541) 269-7984

June 11, 2007

Brad Clinefelter
Kinder Morgan Bulk Terminals, Inc.
PO Box 83838
Portland, OR 97283-0838

RE: Completion of O&M Compliance Inspection
DEQ UST #9786
Kinder Morgan Terminal #4 - Portland

Dear Mr. Clinefelter:

This letter is written to acknowledge a successful completion of the operation and maintenance (O&M) inspection of June 4, 2007, for your above referenced underground storage tank (UST) site. The Department of Environmental Quality (DEQ) has completed a review of the inspection report forms and has determined that the regulated USTs at this facility are in compliance with equipment and release detection standards inspected at that time.

The Department appreciates your efforts to operate and maintain your UST systems in compliance with Oregon environmental law. If you have any questions on this matter please contact me in the Medford DEQ office at, 541-269-2721 x31.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Clough".

Eric Clough
DEQ USTC Project Manager
Underground Storage Tank Program

Cc:

KINDER MORGAN
TERMINALS

To: Jennifer Fax: 503-525-9192
From: Paul Date: 12-3-07
Re: T-4 VST Pages: 3+cover
Cc: _____

☐ Urgent☒ For Review☐ Please Comment☐ Please Reply

Hope this closes the loop!

Paul

Signature:

Confidentiality Warning: This transmission contains confidential information intended for a specific individual and purpose. The information is private, confidential, exempt from disclosure and legally protected by law. If you are not the intended recipient or the employee responsible for delivering the message to the intended recipient, you are notified that any dissemination, distribution or copying of this document is strictly prohibited. If you have received this information in error please notify us immediately by telephone (collect if required) and return the original to us by regular mail.

101 E. Eighth Street, Suite 260, Vancouver, WA 98660

Phone (360) 693-5300

Fax 360-906-0237

Appendix G
Sanborn Fire Insurance Maps

URS



EDR™ Environmental
Data Resources Inc

"Linking Technology with Tradition"

Sanborn® Map Report

Ship To: Matthew Mudge
URS Corporation
111 SW Columbia
Portland, OR 97201

Order Date: 6/18/2004 **Completion Date:** 6/21/2004

Inquiry #: 1215516.2S

P.O. #: .00001

Site Name: Kinder Morgan Bulk Terminal Leasehold

Address: 11040 N Lombard Terminal 4 P

City/State: Portland, OR 97203

Cross Streets:

Customer Project: 25695556
2091179KRA 503-222-7200

Based on client-supplied information, fire insurance maps for the following years were identified

1924 - 1 Map

1950 - 1 Map

1969 - 1 Map

Limited Permission to Photocopy

Total Maps: 3

URS Corporation (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

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KMB00000550

Electronic Sanborn Map Images USER'S GUIDE

Thank you for your interest in electronic Sanborn Map images. The following are guidelines for accessing the images and for transferring them to your system. If you have any questions about the use of electronic Sanborn Map images, contact your EDR Account Executive at 1-800-352-0050.

Organization of Electronic Sanborn Image File

- First Page Sanborn Map Report, listing years of coverage
- Second Page Electronic Sanborn Map Images USER'S GUIDE
- Third Page Oldest Sanborn Map Image
- Last Page Most recent Sanborn Map Image

Navigating the Electronic Sanborn Image File

- Open file on screen.
- Identify TP (Target Property) on the most recent map.
- Find TP on older printed images.
- Using Acrobat, zoom to 250% in order to view more clearly.
 - 200-250% is the approximate equivalent scale of hardcopy Sanborn Maps.
- Zooming in on an image:
 - On the menu bar, click "View" and then zoom.
 - Use the magnifying tool and drag a box around the TP area.

Printing a Sanborn Map from the Electronic File

- EDR recommends printing all images at 300 dpi (300 dpi prints faster than 600 dpi).
- To print only the TP area, cut and paste the area from Adobe Acrobat to your word processor.

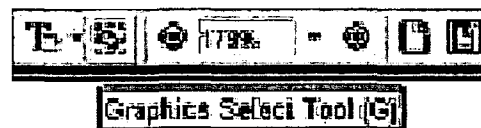
Acrobat Version 4

- Go to the Menu bar
- Press and hold the "T" button
- Choose the Graphics Select Tool
- Draw a box around the area selected
- Go to "Menu"
- Highlight "Edit"
- Highlight "Copy"
- Go to a word processor such as Microsoft Word, paste and print.



Acrobat Version 5

- Go to the Menu bar
- Click the "Graphics Select Tool"
- Draw a box around the area selected
- Go to "Menu"
- Highlight "Edit"
- Highlight "Copy"
- Go to a word processor such as Microsoft Word, paste and print.



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- Due to file size limitations, certain ISPs, including AOL, may occasionally delay or decline to deliver files. Please contact your ISP to identify their specific file size limitations.



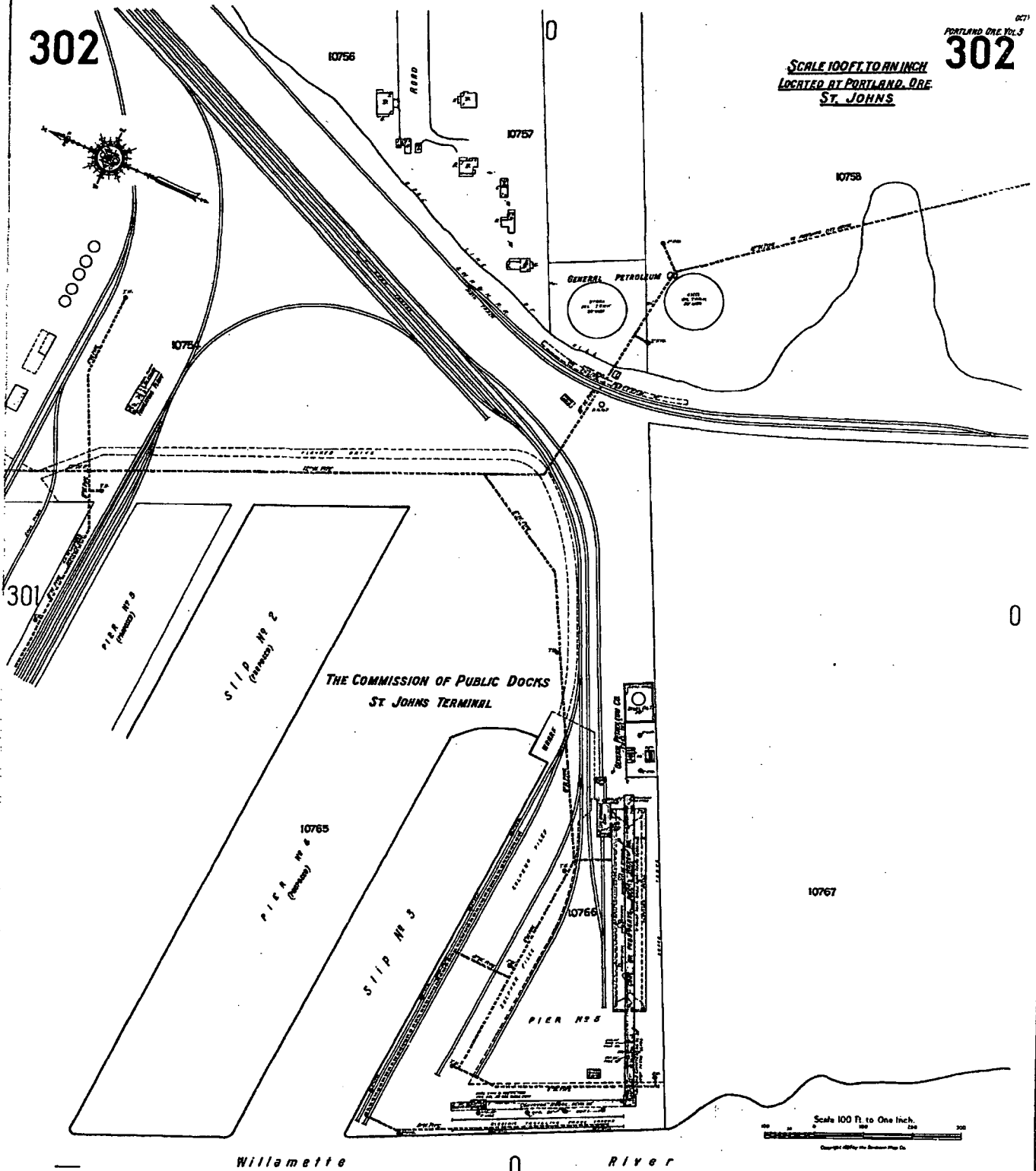
The Sanborn Library, LLC

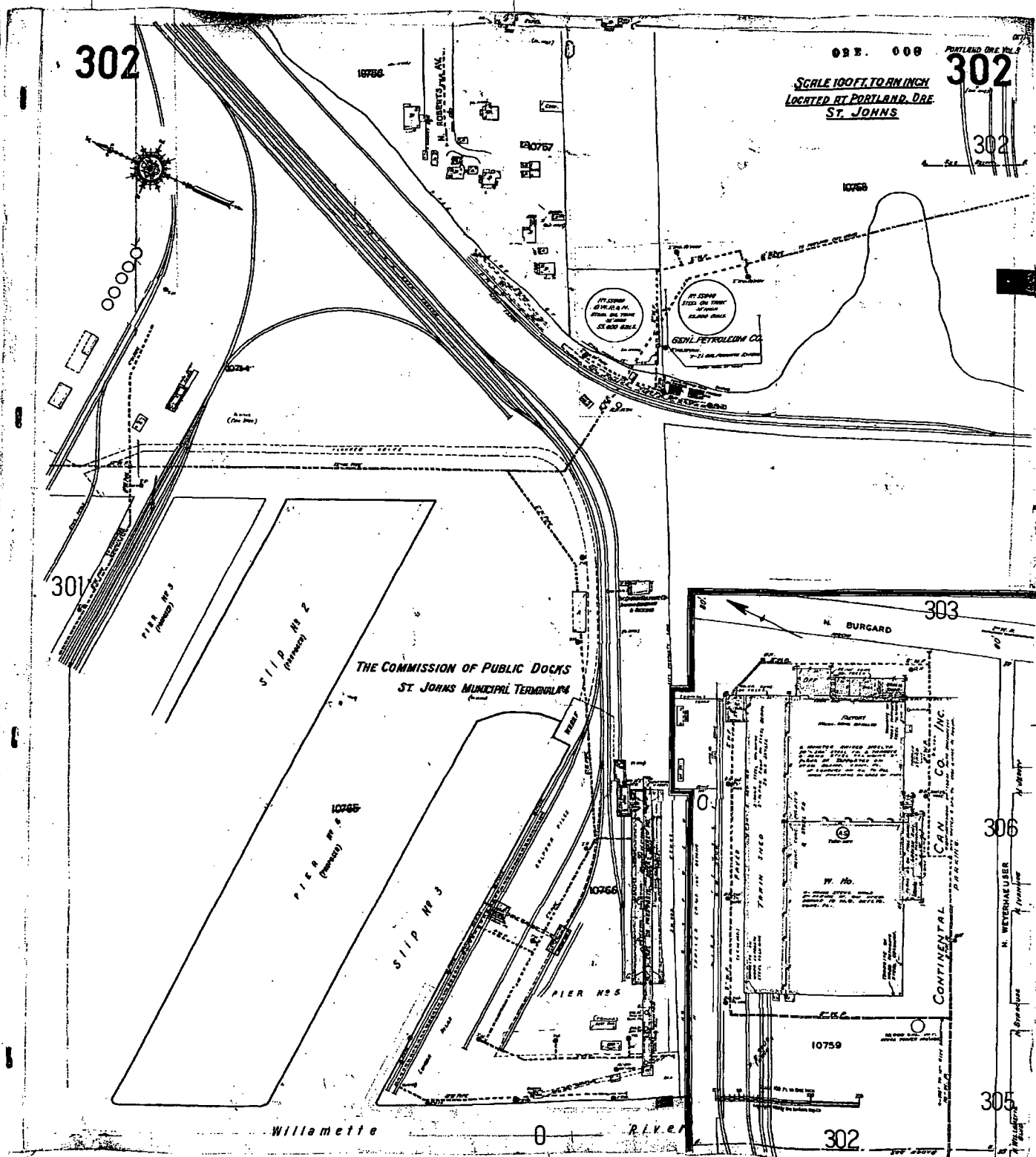
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Year EDR Research Associate

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067
PORTLAND ONE VOL. 3
302

SCALE 100 FT. TO AN INCH
LOCATED AT PORTLAND, ORE.
ST. JOHNS





Appendix H
Aerial Photographs

URS

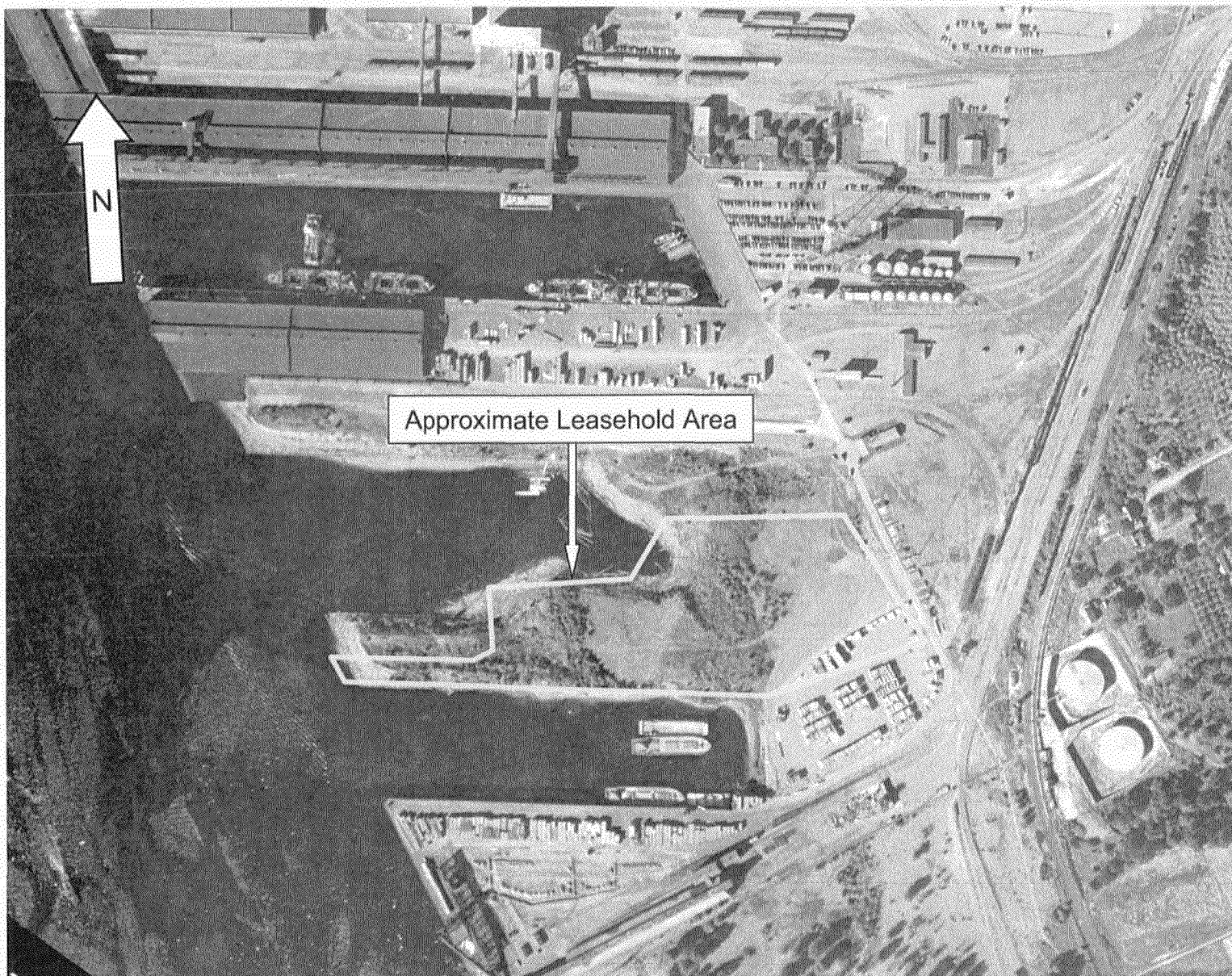


URS

AERIAL PHOTOGRAPH -1936

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 1

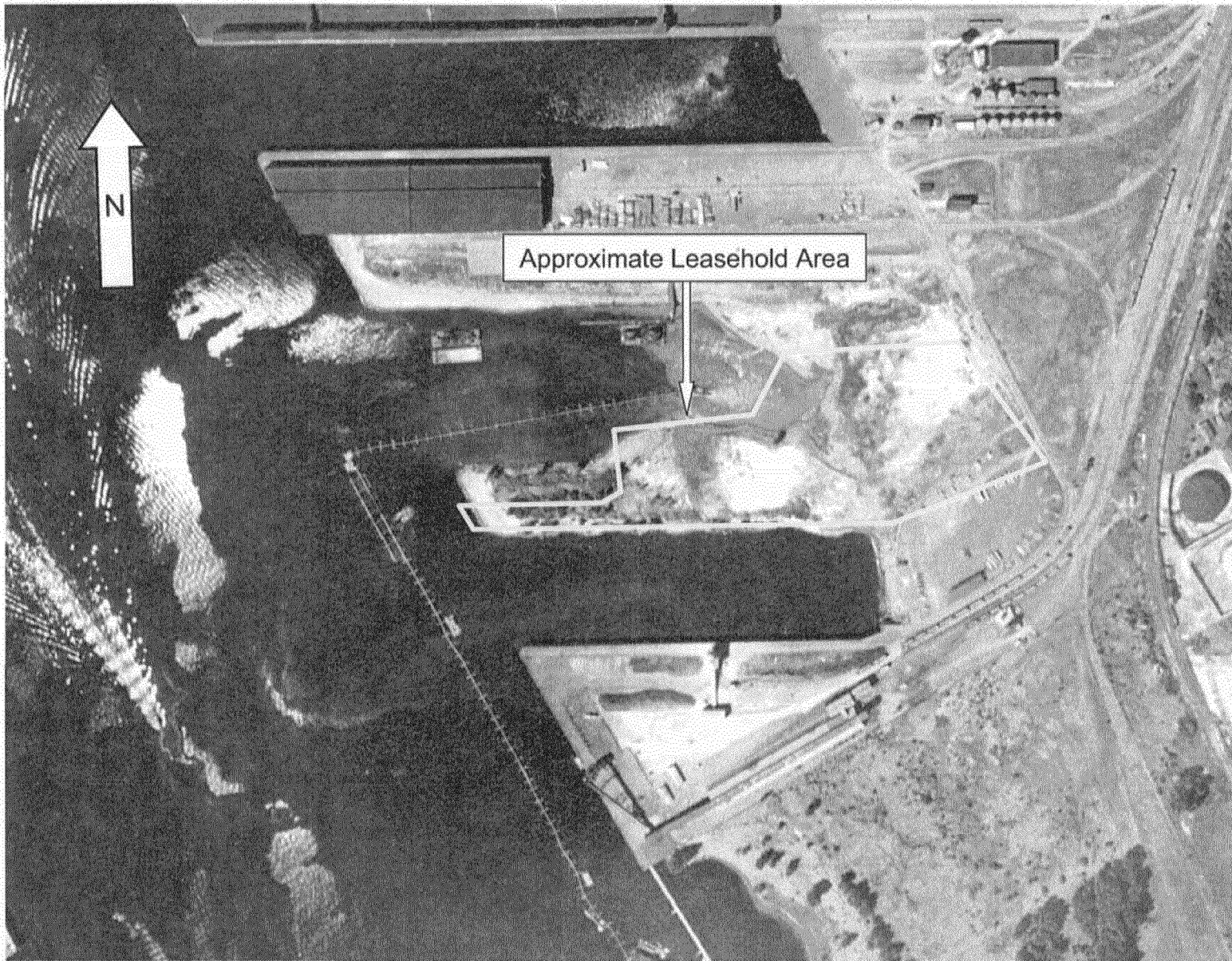


URS

AERIAL PHOTOGRAPH -1944

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 2



URS

AERIAL PHOTOGRAPH -1948

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 3

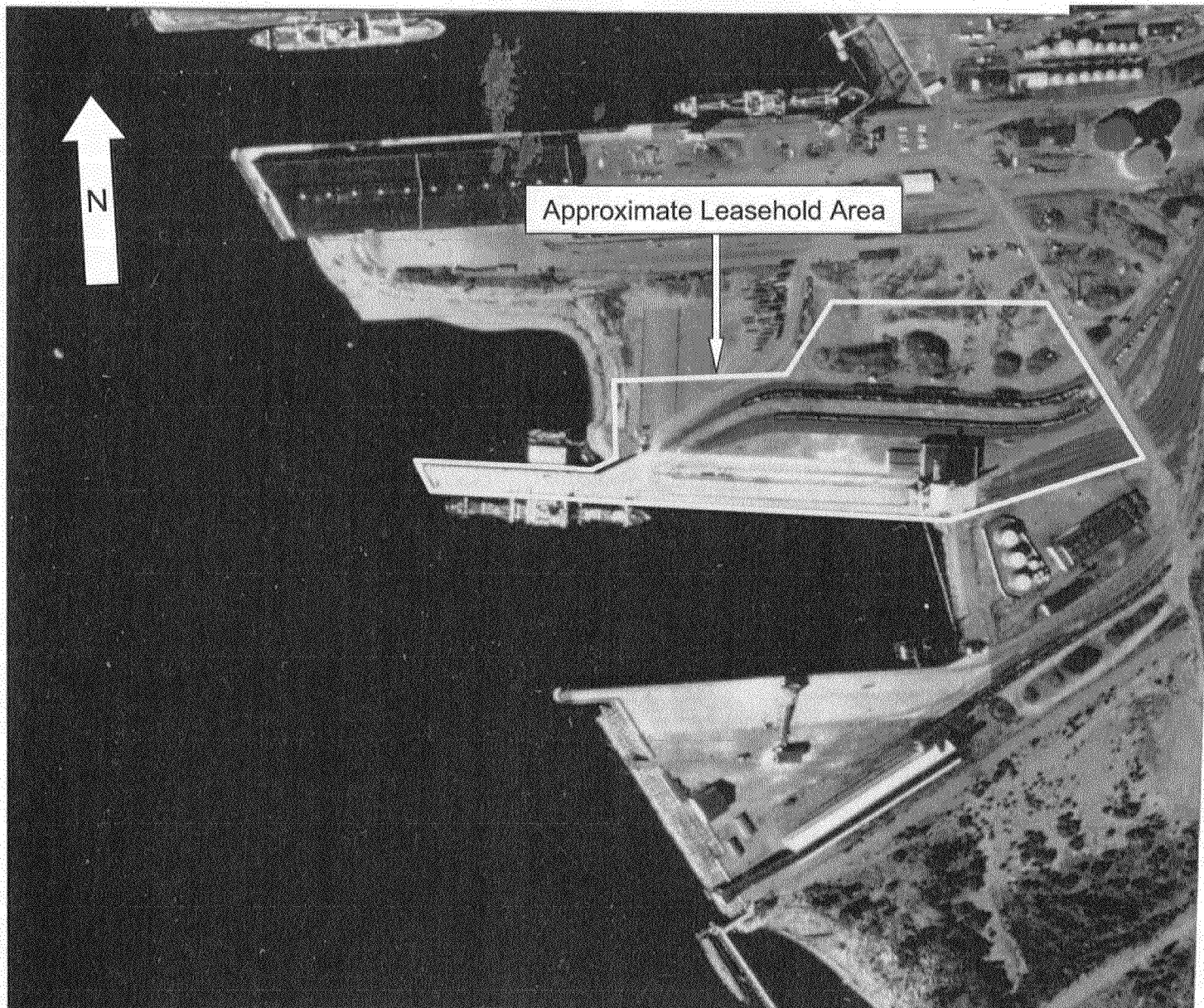


URS

AERIAL PHOTOGRAPH -1955

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 4

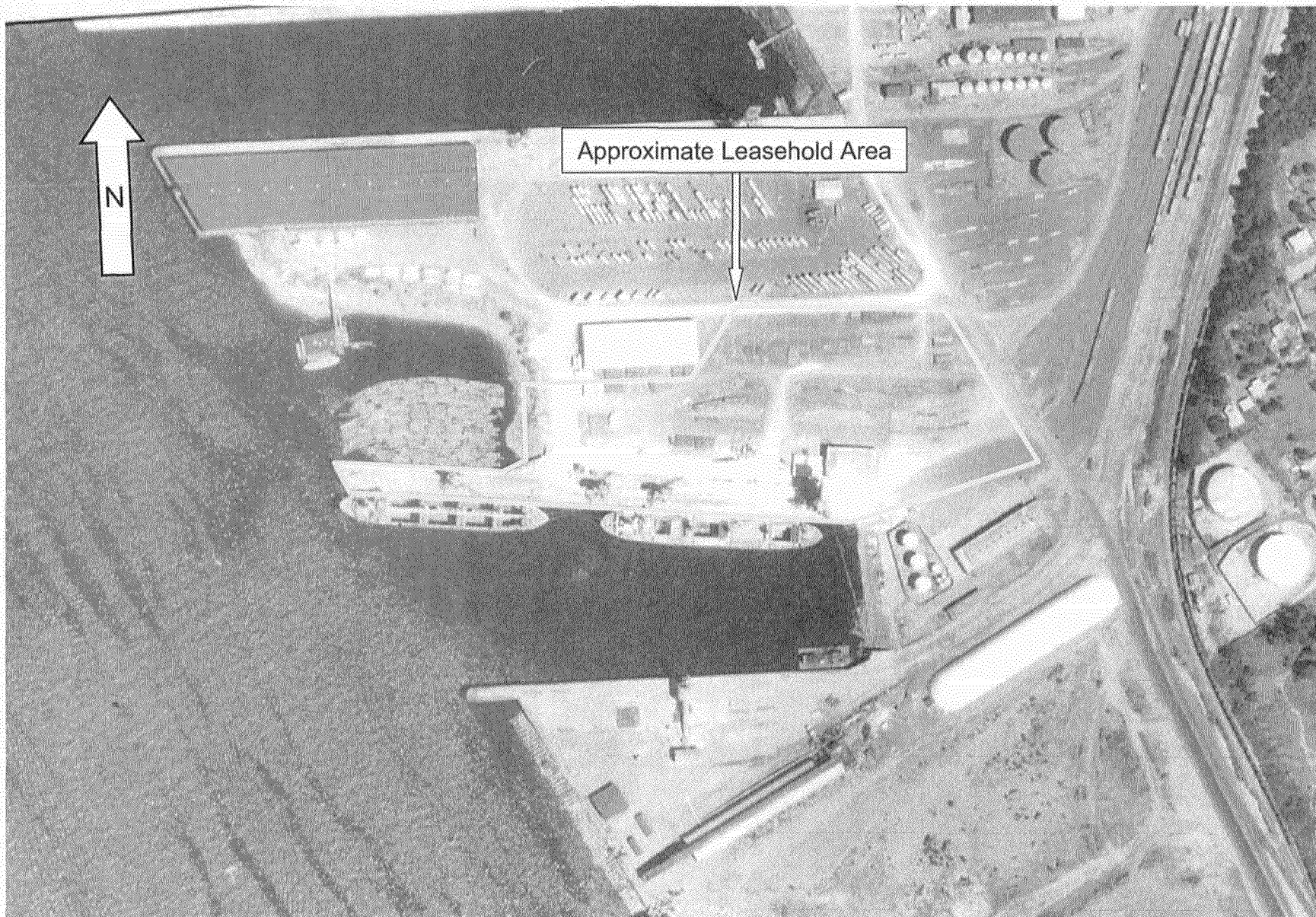


URS

AERIAL PHOTOGRAPH -1963

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 5



URS

AERIAL PHOTOGRAPH -1970

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 6



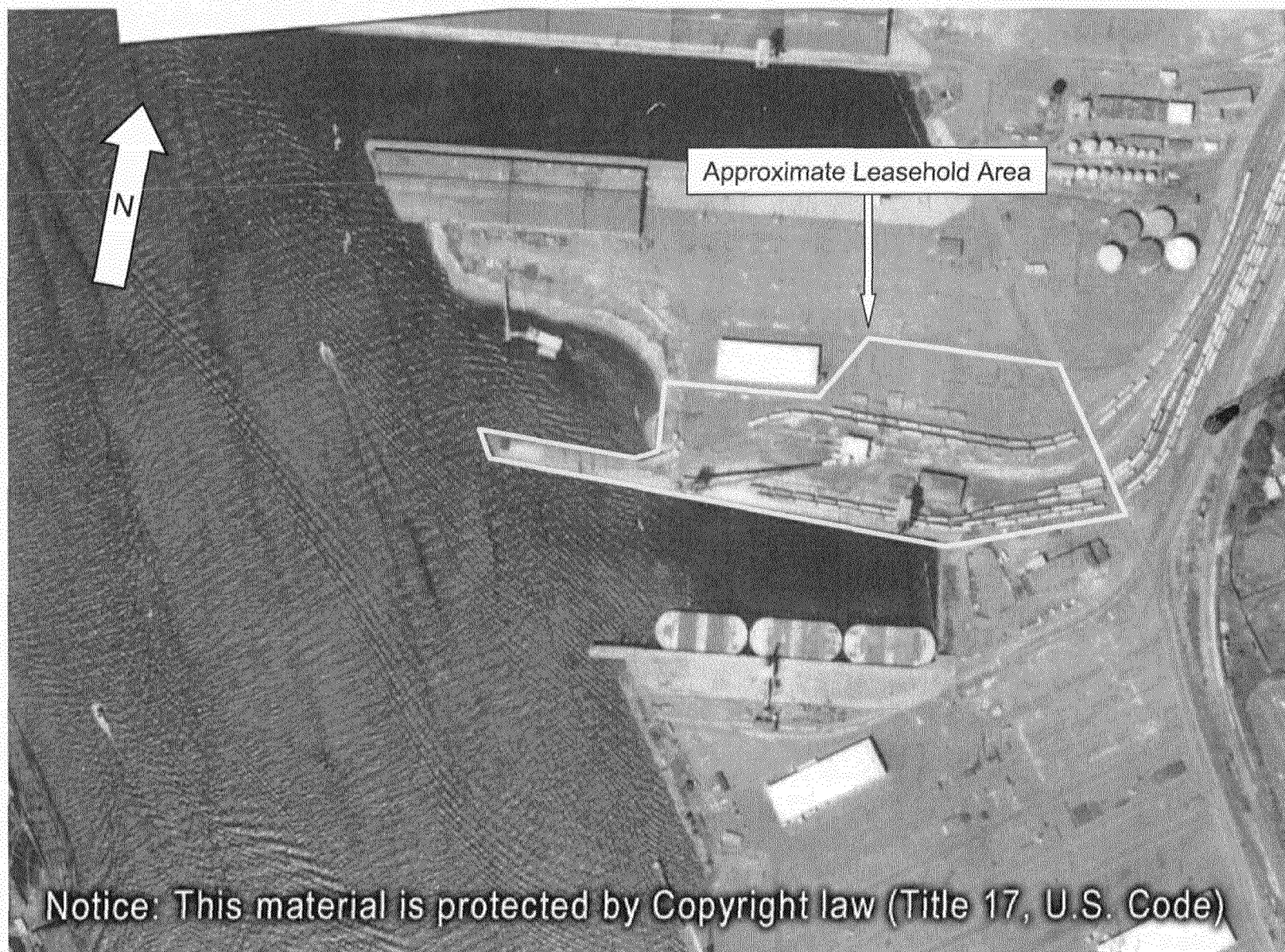
Notice: This material is protected by Copyright law (Title 17, U.S. Code)

URS

AERIAL PHOTOGRAPH -1980

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 7



URS

AERIAL PHOTOGRAPH -1990

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 8



Notice: This material is protected by Copyright law (Title 17, U.S. Code)

URS

AERIAL PHOTOGRAPH -1998

Kinder Morgan Leasehold
Port of Portland - Terminal 4, Pier 4
Portland, Oregon

Photo 9

Appendix I
Subject Site Photographs

URS

Project:

Kinder Morgan Bulk Terminal
Marine Terminal 4

Site Location:

Portland, Oregon

Project No.

25695556

Photo No.

1

Date:

7/16/04

Direction Photo Taken:

SE

Description:

Storage area for gear oil, lubricating oil, and hydraulic oil drums in the southeast corner of the maintenance building. Note secondary containment.


Photo No.

2

Date:

7/16/04

Direction Photo Taken:

East

Description:

Storage area for gear oil, lubricating oil, and hydraulic oil drums was observed in the southeast corner of the maintenance building. Note no secondary containment.





Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 3	Date: 7/16/04		
Direction Photo Taken:			
Description: Steel cabinets located in the southern central portion of the maintenance building used to store chemicals.			

Photo No. 4	Date: 7/16/04	
Direction Photo Taken: South		
Description: Solvent wash station located in the southern central portion of the maintenance building.		


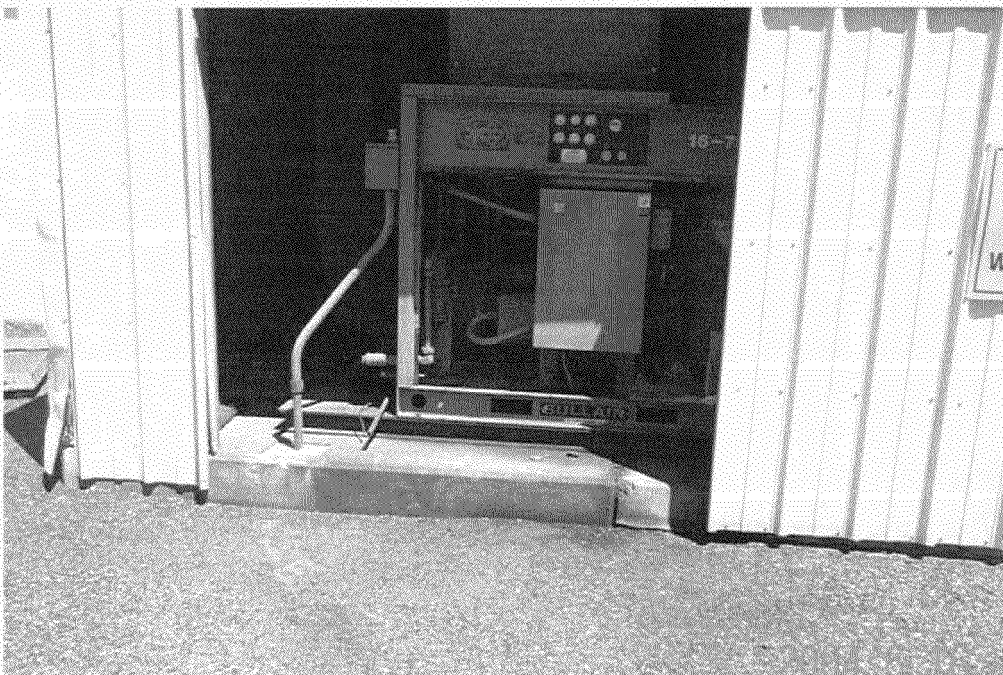
Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 5	Date: 7/16/04		
Direction Photo Taken: SouthWest			
Description: Solvent wash station located in the southern central portion of the maintenance building.			

Photo No. 6	Date: 7/16/04	
Direction Photo Taken: North		
Description: Hydraulic machinery located along the south wall of the pit/rail dump building. Note the minor staining on its concrete pad.		



Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 7	Date: 7/16/04		
Direction Photo Taken: East			
Description: Hydraulic machinery west of the pit/rail dump building associated with moving railcars. Note the minor staining on its concrete pad and absorbent pads were placed under and around the machinery.			

Photo No. 8	Date: 7/16/04	
Direction Photo Taken: South		
Description: An approximate 500-gallon steel waste oil/used oil AST located in the southeast corner of the maintenance building. Note this AST does not have secondary containment and minor staining was observed on the concrete floor under this AST.		

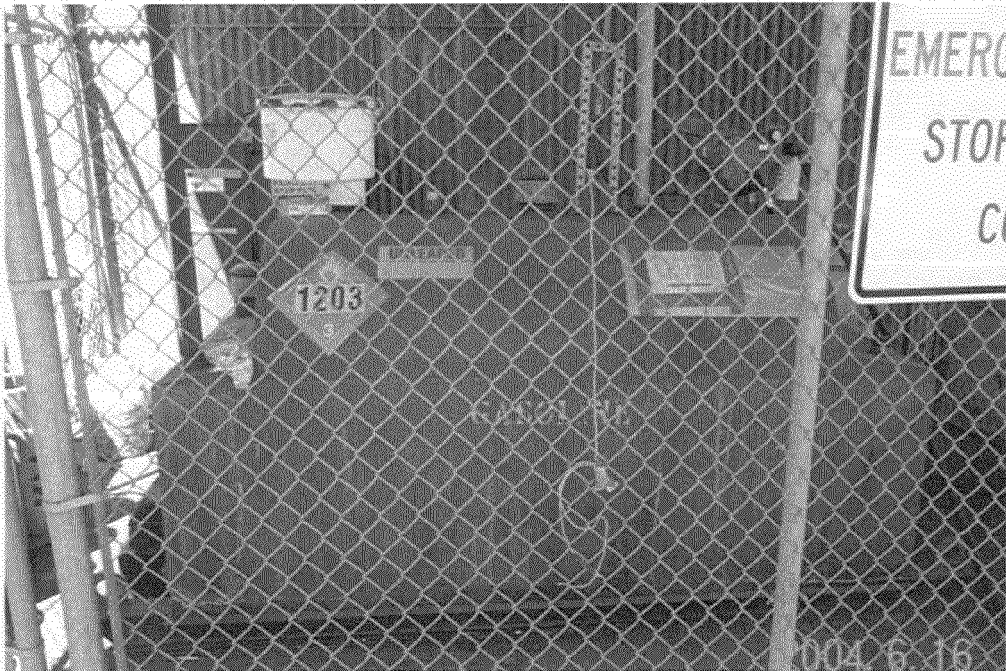
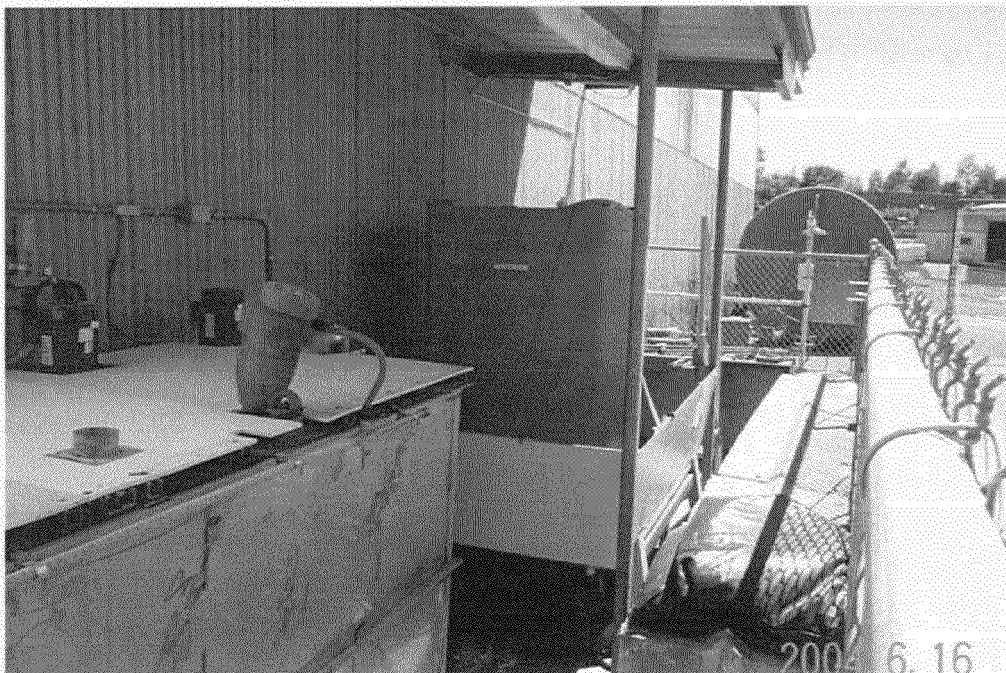
Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 9	Date: 7/16/04		
Direction Photo Taken: West			
Description: An approximate 500-gallon double-walled steel gasoline AST located outside along the east wall of the maintenance shop.			

Photo No. 10	Date: 7/16/04	
Direction Photo Taken: East		
Description: An approximate 330-gallon poly tote of sulfuric acid located outside along the south central wall of the maintenance building. Note the raised secondary containment platform.		

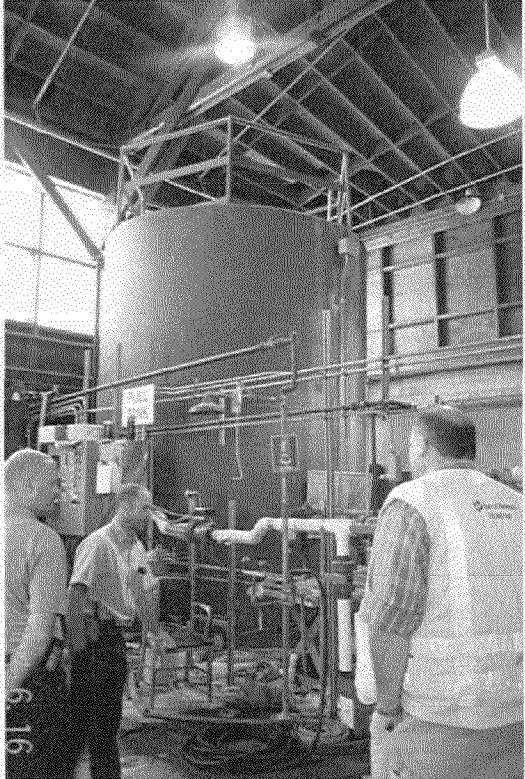
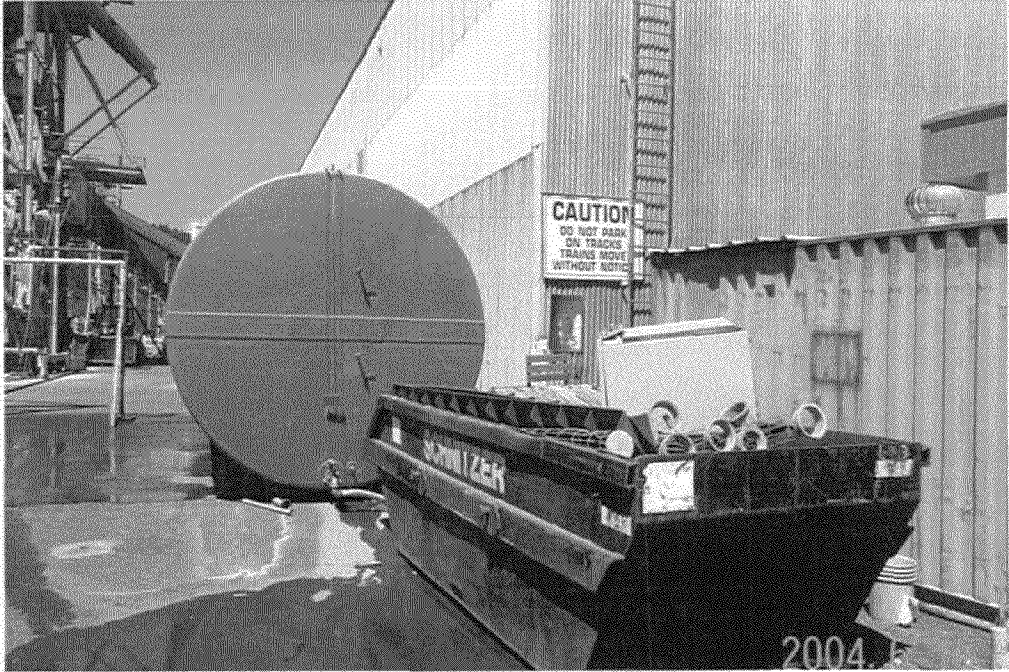
Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 11	Date: 7/16/04		
Direction Photo Taken: SouthWest			
Description: A steel AST of unknown size related to KMBT's wastewater treatment system located inside the maintenance building.			

Photo No. 12	Date: 7/16/04	
Direction Photo Taken: West		
Description: A steel AST of unknown size related to KMBT's wastewater treatment system located outside at the southeast corner of the maintenance building.		

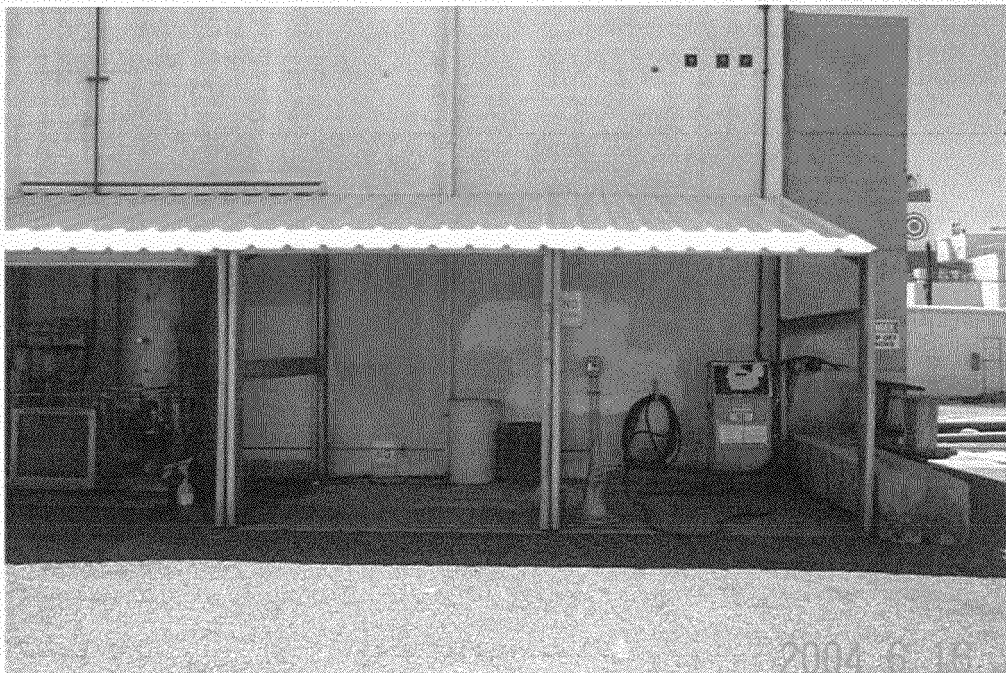
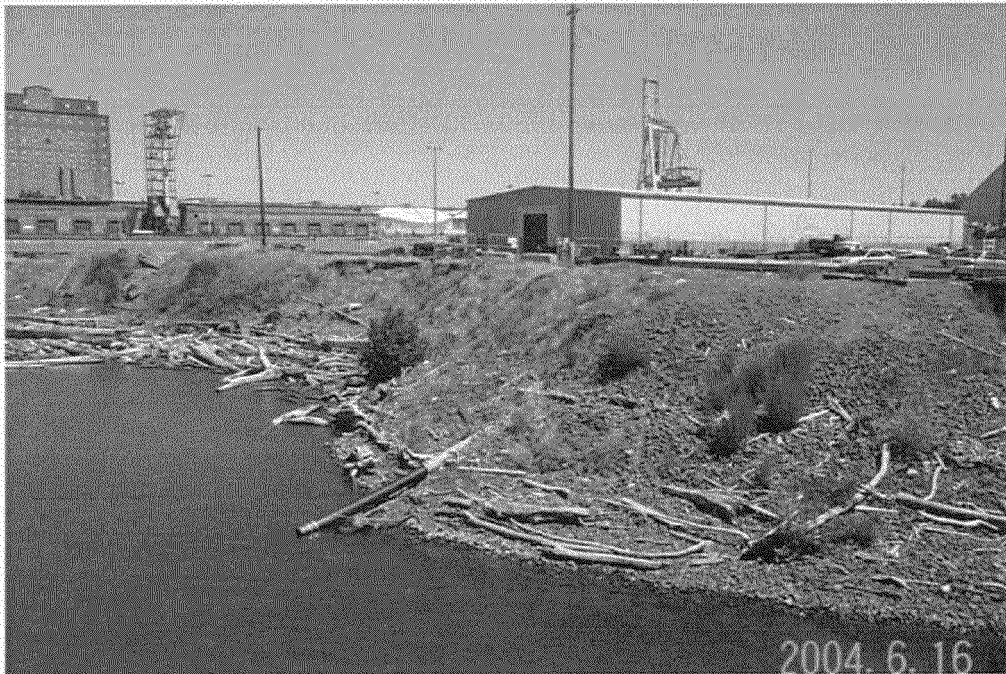
Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 13	Date: 7/16/04		
Direction Photo Taken: South			
Description: A 5,000-gallon double-walled fiberglass diesel UST located at the northwest corner of the pit/rail dump building.			

Photo No. 14	Date: 7/16/04	
Direction Photo Taken: North		
Description: Outfall for storm water run-off to the Willamette River at Wheeler Bay.		

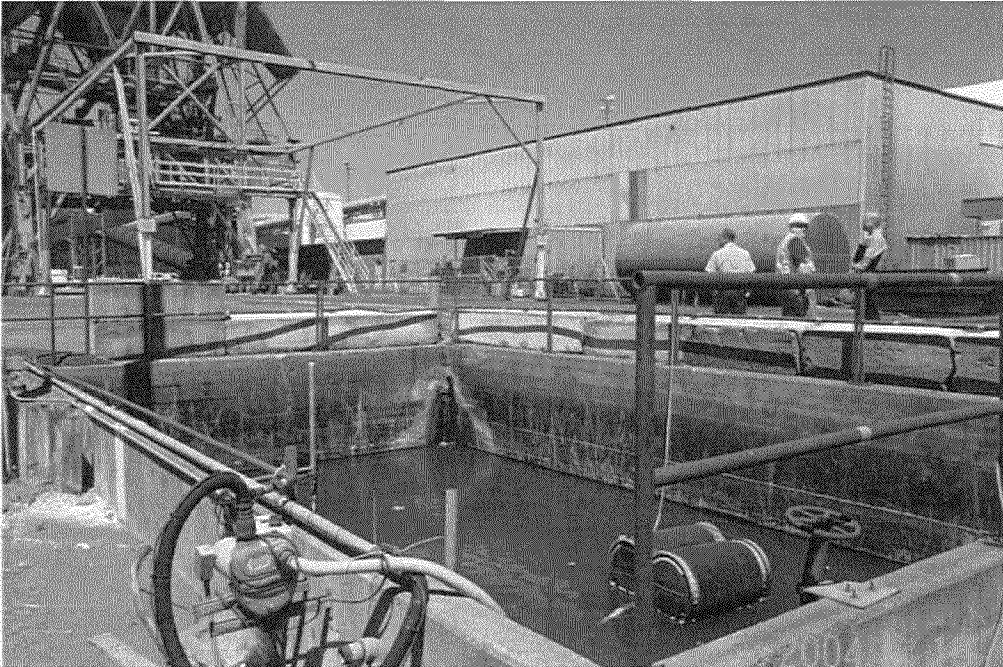

Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 15	Date: 7/16/04		
Direction Photo Taken: NorthWest			
Description: Concrete settling pond located at the southeast corner of the property for the wastewater treatment system.			

Photo No. 16	Date: 7/16/04	
Direction Photo Taken: East		
Description: Modified storm water catch basins with valve and sump to divert water to the concrete settling pond for treatment.		



Project: Kinder Morgan Bulk Terminal Marine Terminal 4		Site Location: Portland, Oregon	Project No. 25695556
Photo No. 17	Date: 7/16/04		
Direction Photo Taken: NorthWest			
Description: Floor drain, plugged with concrete, inside the maintenance building near the wastewater treatment discharge point.			

Photo No. 18	Date: 7/16/04	
Direction Photo Taken: SouthEast		
Description: The Port scrap metal storage area (bone yard), a slag-like material was noted on the ground surface along the southern portion of the property.		

Appendix J
EDR Database Report

URS



EDR™ Environmental
Data Resources Inc

The EDR Radius Map with GeoCheck®

**Kinder Morgan Bulk Terminal Leasehold
11040 N Lombard Terminal 4, P
Portland, OR 97203**

Inquiry Number: 01215516.1r

June 21, 2004

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Map Findings Summary	4
Map Findings	6
Orphan Summary	444
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Government Records Searched/Data Currency Tracking	GR-1
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Physical Setting Source Addendum	A-1
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Physical Setting Source Map	A-7
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Physical Setting Source Records Searched	A-15

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

11040 N LOMBARD TERMINAL 4, P
PORTLAND, OR 97203

COORDINATES

Latitude (North): 45.601400 - 45° 36' 5.0"
Longitude (West): 122.774500 - 122° 46' 28.2"
Universal Tranverse Mercator: Zone 10
UTM X (Meters): 517586.5
UTM Y (Meters): 5049569.0
Elevation: 14 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 45122-E7 LINNTON, OR
Source: USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
PORT OF PORTLAND - TERMINAL 4 11040 N LOMBARD ST PORTLAND, OR 97203	SHWS - ECSI OR CRL UST	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information
System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

EXECUTIVE SUMMARY

RCRIS-TSD..... Resource Conservation and Recovery Information System
RCRIS-LQG..... Resource Conservation and Recovery Information System
RCRIS-SQG..... Resource Conservation and Recovery Information System
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

SWF/LF..... Solid Waste Facilities List
LUST..... Leaking Underground Storage Tank Database
INDIAN UST..... Underground Storage Tanks on Indian Land
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
US BROWNFIELDS..... A Listing of Brownfields Sites
INDIAN RESERV..... Indian Reservations
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
RAATS..... RCRA Administrative Action Tracking System
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
SSTS..... Section 7 Tracking Systems
FTTS INSP..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

OR SPILLS..... Spill Data
AOC COL..... Columbia Slough
AST..... Aboveground Storage Tanks
CDL..... Uninhabitable Drug Lab Properties
HIST LF..... Old Closed SW Disposal Sites
OR HAZMAT..... Hazmat/Incidents
HSIS..... Hazardous Substance Information Survey

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas..... Former Manufactured Gas (Coal Gas) Sites

BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites
Brownfields..... Brownfields Projects
AUL..... Sites with Engineering or Institutional Controls

EXECUTIVE SUMMARY

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASTM STANDARD

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/15/2004 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>CROWN CORK & SEAL CO PLANT 87</i>	<i>10200 N LOMBARD ST</i>	<i>1/2 - 1 E</i>	<i>14</i>	<i>146</i>

STATE ASTM STANDARD

ECSI: The Environmental Cleanup Site Information System records information about sites in Oregon that may be of environmental interest. The data come from the Department of Environmental Quality.

A review of the SHWS - ECSI list, as provided by EDR, has revealed that there are 26 SHWS - ECSI sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>UPRR - ST. JOHNS TANK FARM</i>	<i>6908 N ROBERTS AVENUE</i>	<i>1/4 - 1/2 ENE</i>	<i>A2</i>	<i>45</i>
<i>COLUMBIA RIVER SAND & GRAVEL</i>	<i>10504 NW ST HELENS ROAD</i>	<i>1/2 - 1 WSW</i>	<i>B4</i>	<i>52</i>
<i>LINNTON PLYWOOD ASSOCIATION</i>	<i>10504 NORTHWEST SAINT H</i>	<i>1/2 - 1 WSW</i>	<i>B5</i>	<i>56</i>
<i>BABCOCK LAND COMPANY</i>	<i>9933 NW 107TH AVE</i>	<i>1/2 - 1 WSW</i>	<i>6</i>	<i>69</i>
<i>Not reported</i>	<i>10653 N LOMBARD</i>	<i>1/2 - 1 ENE</i>	<i>7</i>	<i>74</i>
<i>PORT OF PORTLAND - TERMINAL 4</i>	<i>10400 N LOMBARD ST</i>	<i>1/2 - 1 E</i>	<i>C9</i>	<i>81</i>
<i>KLIX CORP.</i>	<i>10771 N LOMBARD ST</i>	<i>1/2 - 1 NE</i>	<i>D10</i>	<i>89</i>
<i>CHEMCENTRAL PORTLAND</i>	<i>10821 N LOMBARD</i>	<i>1/2 - 1 NE</i>	<i>D11</i>	<i>100</i>
<i>BORDEN INC</i>	<i>10915 N LOMBARD ST</i>	<i>1/2 - 1 NE</i>	<i>12</i>	<i>125</i>
<i>WEST COAST ADHESIVE CO.</i>	<i>11104 NW FRONT AVE</i>	<i>1/2 - 1 W</i>	<i>13</i>	<i>139</i>
<i>BP WEST COAST PRODUCTS</i>	<i>9930 NW ST HELENS RD</i>	<i>1/2 - 1 SW</i>	<i>15</i>	<i>149</i>
<i>BOYDSTUN METAL WORKS INC</i>	<i>9002 N SEVER CT</i>	<i>1/2 - 1 NNE</i>	<i>16</i>	<i>166</i>
<i>MOBIL OIL TERMINAL</i>	<i>9420 NW ST. HELENS RD</i>	<i>1/2 - 1 SSW</i>	<i>E18</i>	<i>176</i>
<i>UNION CARBIDE CORP.</i>	<i>11920 N BURGARD ST</i>	<i>1/2 - 1 NNE</i>	<i>F20</i>	<i>187</i>

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
NW PIPE & CASING CO. - PORTLAND	12005 N BURGARD ST.	1/2 - 1 NNE	F21	254
JOSEPH T. RYERSON & SON, INCOR	9040 N BURGARD WAY	1/2 - 1 NNE	F22	274
PREMIER EDIBLE OILS	10400 N BURGARD WAY	1/2 - 1 N	23	277
JEFFERSON SMURFIT	9930 N BURGARD WAY	1/2 - 1 NNE	24	296
PORTLAND CONTAINER REPAIR CORP	9449 N BURGARD WAY	1/2 - 1 NNE	25	305
FOSS MARITIME CO	9030 NW ST HELENS RD	1/2 - 1 S	26	309
OLYMPIC PIPE LINE COMPANY	11400 NW ST HELENS RD	1/2 - 1 WNW	27	327
OWENS CORNING - LINNTON	11444 NW ST. HELENS RD	1/2 - 1 WNW	28	330
RIVERGATE AUTO WRECKING - U PU	12104 N COLUMBIA BLVD	1/2 - 1 NE	G29	341
Not reported	12122 N COLUMBIA BLVD	1/2 - 1 NE	G31	394
BPA - ST. JOHNS SUBSTATION	12567 N COLUMBIA BLVD	1/2 - 1 NE	H33	410
MT. HOOD METALS INC.	9645 N COLUMBIA BLVD	1/2 - 1 ENE	I35	422

OR CRL: Sites that are or may be contaminated and may require cleanup.

A review of the OR CRL list, as provided by EDR, has revealed that there are 14 OR CRL sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
UPRR - ST. JOHNS TANK FARM	6908 N ROBERTS AVENUE	1/4 - 1/2 ENE	A3	52
PORT OF PORTLAND - TERMINAL 4	10400 N LOMBARD ST	1/2 - 1 E	C8	81
KLIX CORP.	10771 N LOMBARD ST	1/2 - 1 NE	D10	89
CHEMCENTRAL PORTLAND	10821 N LOMBARD	1/2 - 1 NE	D11	100
BP WEST COAST PRODUCTS	9930 NW ST HELENS RD	1/2 - 1 SW	15	149
OLYMPIC PIPE LINE PORTLAND DEL	9420 NW ST HELENS RD	1/2 - 1 SSW	E17	176
MOBIL OIL TERMINAL	9420 NW ST. HELENS RD	1/2 - 1 SSW	E19	186
UNION CARBIDE CORP.	11920 N BURGARD ST	1/2 - 1 NNE	F20	187
PREMIER EDIBLE OILS	10400 N BURGARD WAY	1/2 - 1 N	23	277
FOSS MARITIME CO	9030 NW ST HELENS RD	1/2 - 1 S	26	309
RIVERGATE AUTO WRECKING - U PU	12104 N COLUMBIA BLVD	1/2 - 1 NE	G30	394
PACIFIC CAR CRUSHING	12122 N COLUMBIA BLVD	1/2 - 1 NE	G32	410
BPA - ST. JOHNS SUBSTATION	12567 N COLUMBIA BLVD	1/2 - 1 NE	H34	420
MT. HOOD METALS INC.	9645 N COLUMBIA BLVD	1/2 - 1 ENE	I36	443

OR VCS: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

A review of the OR VCS list, as provided by EDR, and dated 05/14/2004 has revealed that there is 1 OR VCS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
UPRR - ST. JOHNS TANK FARM	6908 N ROBERTS AVENUE	1/4 - 1/2 ENE	A2	45

BROWNFIELDS DATABASES

OR VCS: Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

A review of the OR VCS list, as provided by EDR, and dated 05/14/2004 has revealed that there is 1 OR

EXECUTIVE SUMMARY

VCS site within approximately 0.5 miles of the target property.

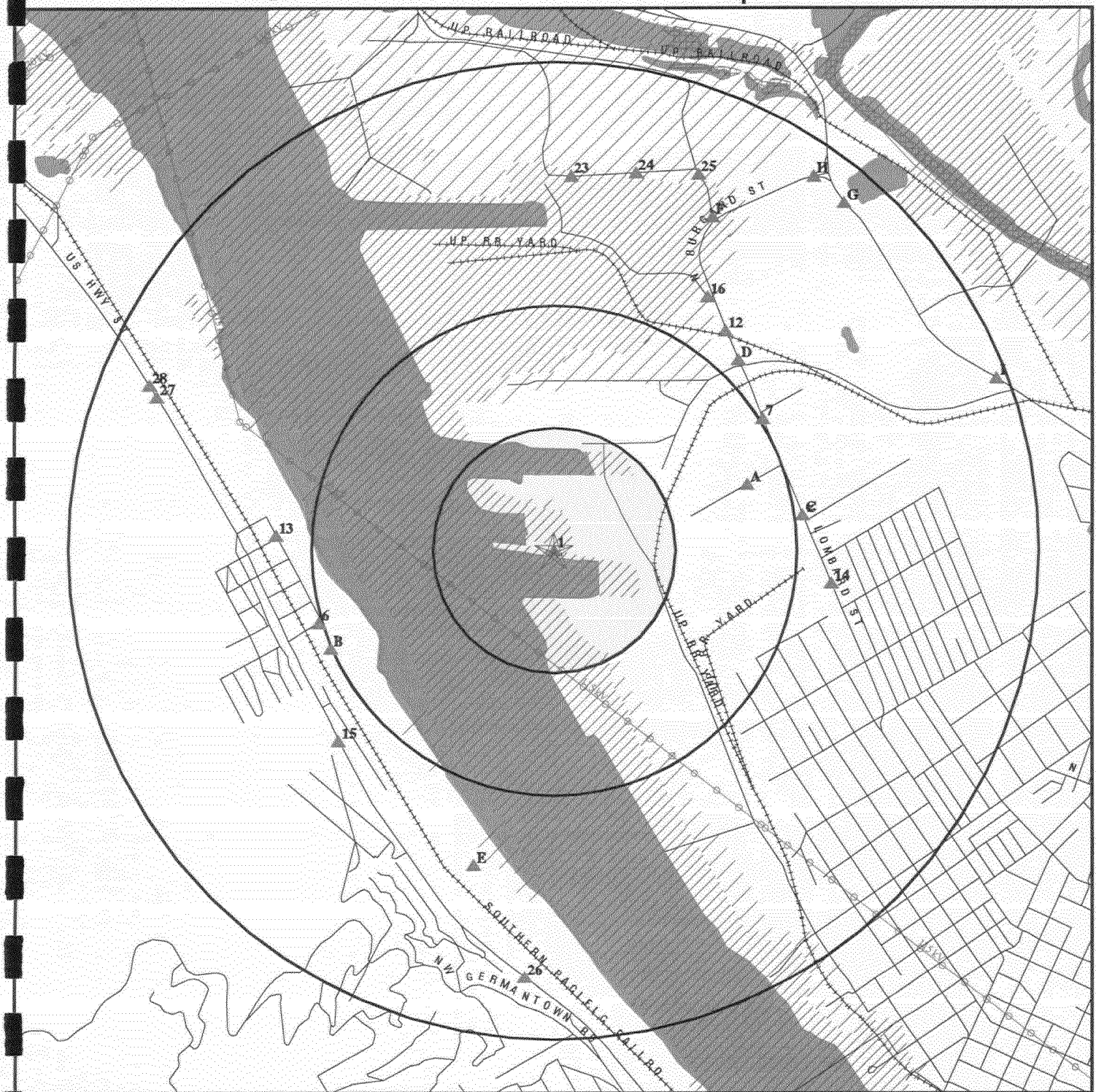
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>UPRR - ST. JOHNS TANK FARM</i>	<i>6908 N ROBERTS AVENUE</i>	<i>1/4 - 1/2 ENE</i>	<i>A2</i>	<i>45</i>

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
ST. HELENS RD - GASOLINE SPILL	SHWS - ECSI, FINDS
WELCH PROPERTY - 9902-03 N. HURST	SHWS - ECSI
SCHNITZER STEEL INDUSTRIES - NORTH	SHWS - ECSI
PETROLEUM RELEASE - N EDGEWATER ST	SHWS - ECSI
WILLAMETTE COVE	SHWS - ECSI, FINDS, OR VCS
RK STORAGE AND WAREHOUSING	SHWS - ECSI, FINDS
PORT OF PORTLAND - TERMINAL 4 SLIP	SHWS - ECSI
BLUE LAGOON - MARINE TERMINAL 5	SHWS - ECSI
SOUTH RIVERGATE INDUSTRIAL PARK	SHWS - ECSI, FINDS
LINNTON OIL FIRE TRAINING GROUNDS	SHWS - ECSI
COLUMBIA SLOUGH	SHWS - ECSI
MULTNOMAH COUNTY - ST. JOHNS SITE	SHWS - ECSI, FINDS
MOCKS BOTTOM	SHWS - ECSI, FINDS
V.A.- COLUMBIA SOUTH SHORE WELLFIE	SHWS - ECSI
LARSEN NORTH - CITY OF PORTLAND	SHWS - ECSI, FINDS
ST. JOHNS - KEELER #2 RIGHT-OF-WAY	SHWS - ECSI
OLYMPIC PIPE LINE PORTLAND DELIVER	SHWS - ECSI
KINDER MORGAN LIQUID TERMINALS - L	SHWS - ECSI
TRANSLOADER INTERNATIONAL COMPANY	SHWS - ECSI
TRIANGLE PARK - NORTH PORTLAND YAR	SHWS - ECSI
ALDER CREEK LUMBER COMPANY INCORPO	SHWS - ECSI, FINDS
NEW COLUMBIA HOPE VI	SHWS - ECSI, OR VCS
KFD LANDFILL	SWF/LF
CITY OF PORTLAND	SWF/LF, OR SPILLS
BERTHA TRIANGLE	Brownfields
CEREAL FOOD PROCESSORS INC	RCRIS-SQG, FINDS
ST JOHNS JUNCTION P L DELIVERY FAC	RCRIS-SQG, FINDS
PORT OF PORTLAND - TERMINAL EXPANS	OR VCS
BERTHA TRIANGLE	OR VCS
BLUE LAGOON - MARINE TERMINAL 5	OR VCS
KINDER MORGAN LIQUID TERMINALS - L	OR VCS

OVERVIEW MAP - 01215516.1r - URS Corporation



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Indian Reservations BIA
- ~ Power transmission lines
- ~ Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Federal Wetlands
- Areas of Concern

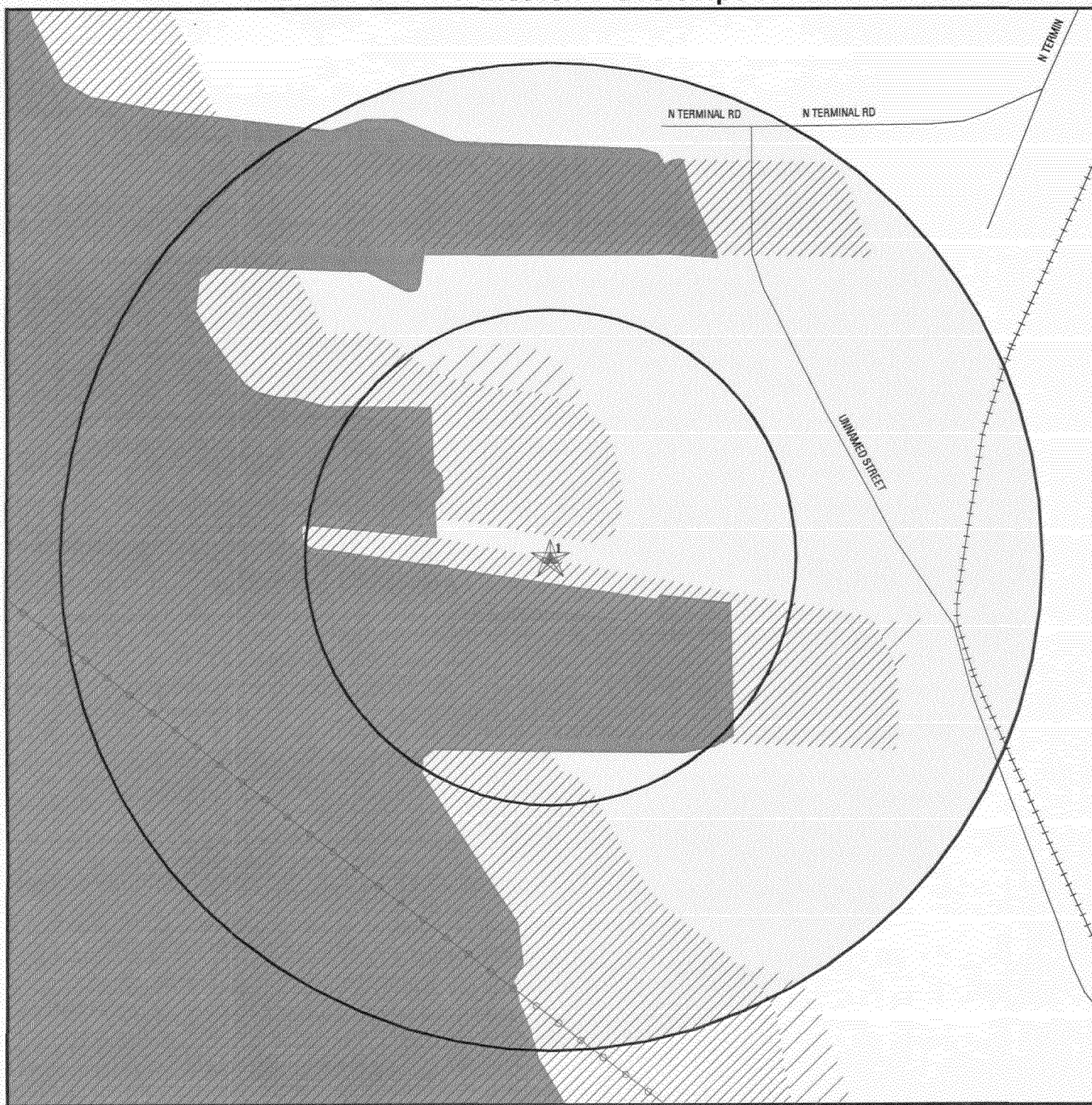
TARGET PROPERTY: Kinder Morgan Bulk Terminal Leasehold
ADDRESS: 11040 N Lombard Terminal 4, P
CITY/STATE/ZIP: Portland OR 97203
LAT/LONG: 45.6014 / 122.7745

CUSTOMER: URS Corporation
CONTACT: Matthew Mudge
INQUIRY #: 01215516.1r
DATE: June 21, 2004 8:35 am

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KMB00000584

DETAIL MAP - 01215516.1r - URS Corporation



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- ⚡ Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites

- Indian Reservations BIA
- ⚡ Power transmission lines
- ⚡ Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Federal Wetlands

■ Areas of Concern

0 1/16 1/8 1/4 Miles

TARGET PROPERTY: Kinder Morgan Bulk Terminal Leasehold
 ADDRESS: 11040 N Lombard Terminal 4, P
 CITY/STATE/ZIP: Portland OR 97203
 LAT/LONG: 45.6014 / 122.7745

CUSTOMER: URS Corporation
 CONTACT: Matthew Mudge
 INQUIRY #: 01215516.1r
 DATE: June 21, 2004 8:35 am

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KMB00000585

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL ASTM STANDARD</u>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	1	NR	1
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
<u>STATE ASTM STANDARD</u>								
State Haz. Waste - ECSI	X	1.000	0	0	1	25	NR	26
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
UST	X	0.250	0	0	NR	NR	NR	0
OR CRL	X	1.000	0	0	1	13	NR	14
INDIAN UST		0.250	0	0	NR	NR	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
OR VCS		0.500	0	0	1	NR	NR	1
<u>FEDERAL ASTM SUPPLEMENTAL</u>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
DOD		1.000	0	0	0	0	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
<u>STATE OR LOCAL ASTM SUPPLEMENTAL</u>								
OR SPILLS		TP	NR	NR	NR	NR	NR	0
AOC COL		1.000	0	0	0	0	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
AST	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
HIST LF		0.500	0	0	0	NR	NR	0
OR HAZMAT	TP		NR	NR	NR	NR	NR	0
HSIS	TP		NR	NR	NR	NR	NR	0

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas		1.000	0	0	0	0	NR	0
----------	--	-------	---	---	---	---	----	---

BROWNFIELDS DATABASES

US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Brownfields		0.500	0	0	0	NR	NR	0
AUL		0.250	0	0	NR	NR	NR	0
OR VCS		0.500	0	0	1	NR	NR	1

NOTES:

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

1	PORT OF PORTLAND - TERMINAL 4	SHWS - ECSI	U003580449
Target	11040 N LOMBARD ST	OR CRL	N/A
Property	PORTLAND, OR 97203	UST	

Actual:
14 ft.

ECSI:

State ID Number: 272
Study Area: False
Cerclis ID: 987172509
Size: 145.7 acres
Orphan: False
Lat/Long: 45.6033 / -122.773
Township Coord.: 1.00
Range Coord.: 1.00
Section Coord.: 2
Legislative : 2
FACA ID : 6848
Update Date : 1998-12-10 00:00:00
Created Time : 1988-08-17 00:00:00

Brown ID
Coordinator Supplier: gmw
Tax Lots: 110,42,102,93,119,124
NPL: False
Region ID: 2
Tax Lots: 110,42,102,93,119,124
Township Zone: N
Range Zone: W
Qtr Section: AC
Further Action: 256
Score Value: 87
Created Date: CONV

HAZ RELEASED:

Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121639
Code : 7439-92-1
Substance Name : LEAD
Substance Abbrev. : Not reported
Substance Categ ID : 8466
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319256
Sub Alias Name : PB
Sampling Result ID : 345634
Feature Id : Not reported
Hazard Release Id : 378758
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : y
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 890.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Pre-dredging sample. Highest post-dredging concentration was 790 mg/kg.
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Substance ID : 121664
Code : 7440-38-2
Substance Name : ARSENIC
Substance Abbrev. : Not reported
Substance Categ ID : 8439
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319286
Sub Alias Name : AS
Sampling Result ID : 342809
Feature Id : Not reported
Hazard Release Id : 378774
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : core: 17- 23 inches deep
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 80.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121196
Code : 207-08-9
Substance Name : BENZO(k)FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8478
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317400
Sub Alias Name : B(k)F
Substance Alias ID : 317401
Sub Alias Name : BENZOFLUORANTHENE,11,12-
Sampling Result ID : 342804
Feature Id : Not reported
Hazard Release Id : 380899
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Minimum Concentration : .00
Max Concentration : 35.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Sampling Result ID : 342822
Feature Id : Not reported
Hazard Release Id : 380899
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .50
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121415
Code : 53-70-3
Substance Name : DIBENZO(a,h)ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8499
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318667
Sub Alias Name : DB(a,h)A
Substance Alias ID : 318668
Sub Alias Name : DIBENZ(a,h)ANTHRACENE
Substance Alias ID : 318669
Sub Alias Name : DIBENZANTHRACENE,1,2-5,6-
Substance Alias ID : 318670
Sub Alias Name : DIBENZANTHRACENE,1,2:5,6-
Sampling Result ID : 342805
Feature Id : Not reported
Hazard Release Id : 380900
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 14.00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Sampling Result ID : 342824
Feature Id : Not reported
Hazard Release Id : 380900
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .10
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121197
Code : 208-96-8
Substance Name : ACENAPHTHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 342806
Feature Id : Not reported
Hazard Release Id : 380901
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .53
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Sampling Result ID : 342816
Feature Id : Not reported
Hazard Release Id : 380901
Medium Code Id : 698
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-07-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .20
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 120952
Code : 120-12-7
Substance Name : ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8473
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316696
Sub Alias Name : ANTHRACIN
Substance Alias ID : 316697
Sub Alias Name : GREEN OIL
Substance Alias ID : 316698
Sub Alias Name : PARANAPHTHALENE
Substance Alias ID : 316699
Sub Alias Name : TETRA OLIVE N2G
Sampling Result ID : 342807
Feature Id : Not reported
Hazard Release Id : 380902
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 13.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Sampling Result ID : 342817
Feature Id : Not reported
Hazard Release Id : 380902
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 3.20
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121662
Code : 7440-36-0
Substance Name : ANTIMONY
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319283
Sub Alias Name : SB
Substance Alias ID : 319284
Sub Alias Name : STIBIUM
Sampling Result ID : 342808
Feature Id : Not reported
Hazard Release Id : 380903
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : core: 22- 30 in deep
Start Date : 1995-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 2.80
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121673
Code : 7440-50-8
Substance Name : COPPER
Substance Abbrev. : Not reported
Substance Categ ID : 8464
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Substance Alias ID : 319296
Sub Alias Name : CU
Sampling Result ID : 342810
Feature Id : Not reported
Hazard Release Id : 380904
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1995-01-05 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 460.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported

Substance ID : 121646
Code : 7440-02-0
Substance Name : NICKEL
Substance Abbrev. : Not reported
Substance Categ ID : 8469
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319266
Sub Alias Name : NI
Sampling Result ID : 342811
Feature Id : Not reported
Hazard Release Id : 380905
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1995-01-05 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 1300.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : From single post-dredging sample. Next highest concentration encountered was 28 mg.kg.

Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121654

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Code : 7440-22-4
Substance Name : SILVER
Substance Abbrev. : Not reported
Substance Categ ID : 8470
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319274
Sub Alias Name : AG
Sampling Result ID : 342812
Feature Id : Not reported
Hazard Release Id : 380906
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 2.50
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121982
Code : ECD169
Substance Name : DIESEL - FUEL OIL
Substance Abbrev. : Not reported
Substance Categ ID : 8529
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 342813
Feature Id : Not reported
Hazard Release Id : 380907
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : 16.5 feet bgs
Start Date : 1993-07-20 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 16000.00
Last Update By : sxf

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Last Updated On : 1997-04-01 00:00:00
Sample Comment : soil boring
Sampling Result ID : 342833
Feature Id : Not reported
Hazard Release Id : 380907
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 110.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121988
Code : ECD198
Substance Name : OIL - LUBRICATING
Substance Abbrev. : Not reported
Substance Categ ID : 8531
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 342814
Feature Id : Not reported
Hazard Release Id : 380908
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : 5 feet bgs
Start Date : 1993-06-17 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 450.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : soil boring
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121051
Code : 1330-20-7

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Substance Name : XYLENEs
Substance Abbrev. : Not reported
Substance Categ ID : 8526
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317017
Sub Alias Name : DIMETHYLBENZENEs
Substance Alias ID : 317018
Sub Alias Name : XYLOLs
Sampling Result ID : 342834
Feature Id : Not reported
Hazard Release Id : 380909
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 3.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 342836
Feature Id : Not reported
Hazard Release Id : 380909
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : 19 feet bgs
Start Date : 1993-01-20 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 81.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Soil boring
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 122012
Code : ECD275
Substance Name : TOTAL PETROLEUM HYDROCARBONS (TPH)
Substance Abbrev. : Not reported
Substance Categ ID : 8540
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 342835
Feature Id : Not reported
Hazard Release Id : 380910
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : 17 feet bgs
Start Date : 1993-07-19 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 33000.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Combined diesel fuel and oil in soil boring IB-27.
Sampling Result ID : 342837
Feature Id : Not reported
Hazard Release Id : 380910
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 110.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Quant. Released: 100 tons
Date: 3/28/86
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 122002
Code : ECD243
Substance Name : POLYAROMATIC HYDROCARBONS (PAH)
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318143
Sub Alias Name : PAH
Substance Alias ID : 318148
Sub Alias Name : POLYCYCLIC AROMATIC HYDROCARBONS (PAH)
Substance Alias ID : 318149
Sub Alias Name : POLYNUCLEAR AROMATIC HYDROCARBINS (PNA)
Substance Alias ID : 318150

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Sub Alias Name : PNA
Sampling Result ID : 345175
Feature Id : Not reported
Hazard Release Id : 383045
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-29 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 813.60
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121815
Code : 83-32-9
Substance Name : ACENAPHTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8471
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317621
Sub Alias Name : DIHYDROACENAPHTHYLENE,1,2-
Substance Alias ID : 317622
Sub Alias Name : ETHYLENENAPHTHALENE,1,8-
Substance Alias ID : 317623
Sub Alias Name : PERIETHYLENENAPHTHALENE
Sampling Result ID : 342815
Feature Id : Not reported
Hazard Release Id : 383316
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-07-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 10.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 345620
Feature Id : Not reported
Hazard Release Id : 383316

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 16.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121829
Code : 86-73-7
Substance Name : FLUORENE
Substance Abbrev. : Not reported
Substance Categ ID : 8489
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317663
Sub Alias Name : BIPHENYLENEMETHANE,o-
Substance Alias ID : 317664
Sub Alias Name : DIPHENYLENEMETHANE
Substance Alias ID : 317665
Sub Alias Name : METHYLENEBIPHENYL,2,2'-
Sampling Result ID : 342826
Feature Id : Not reported
Hazard Release Id : 383317
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 28.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 345621
Feature Id : Not reported
Hazard Release Id : 383317
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 6.90
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121195
Code : 206-44-0
Substance Name : FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8491
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317398
Sub Alias Name : BENZACENAPHTHENE,1,2-
Substance Alias ID : 317399
Sub Alias Name : BENZO(jk)FLUORENE
Sampling Result ID : 342825
Feature Id : Not reported
Hazard Release Id : 383318
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 1.40
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Sampling Result ID : 345622
Feature Id : Not reported
Hazard Release Id : 383318
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Max Concentration : 120.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121019
Code : 129-00-0
Substance Name : PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8497
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316950
Sub Alias Name : BENZO(def)PHENANTHRENE
Sampling Result ID : 342830
Feature Id : Not reported
Hazard Release Id : 383319
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 4.10
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 345623
Feature Id : Not reported
Hazard Release Id : 383319
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 100.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

PORT OF PORTLAND - TERMINAL 4 (Continued)

Database(s)
EDR ID Number
EPA ID Number

U003580449

Substance ID : 121462
Code : 56-55-3
Substance Name : BENZO(a)ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8475
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318790
Sub Alias Name : BENZ(a)ANTHRACENE
Substance Alias ID : 318791
Sub Alias Name : BENZANTHRACENE,1,2-
Substance Alias ID : 318792
Sub Alias Name : BENZANTHRENE
Substance Alias ID : 318793
Sub Alias Name : BENZOANTHRACENE
Substance Alias ID : 318794
Sub Alias Name : BENZPHENANTHRENE,2,3-
Substance Alias ID : 318795
Sub Alias Name : NAPHTHANTHRACENE
Substance Alias ID : 318796
Sub Alias Name : TETRAPHENE
Sampling Result ID : 342818
Feature Id : Not reported
Hazard Release Id : 383320
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 1.10
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 345624
Feature Id : Not reported
Hazard Release Id : 383320
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 78.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

PORT OF PORTLAND - TERMINAL 4 (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003580449

Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121210
Code : 218-01-9
Substance Name : CHRYSENE
Substance Abbrev. : Not reported
Substance Categ ID : 8481
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317438
Sub Alias Name : BENZ(a)PHENANTHRENE
Substance Alias ID : 317439
Sub Alias Name : BENZPHENANTHRENE,1,2-
Substance Alias ID : 317440
Sub Alias Name : DIBENZONAPHTHALENE,1,2,5,6-
Sampling Result ID : 342823
Feature Id : Not reported
Hazard Release Id : 383321
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 2.30
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 345625
Feature Id : Not reported
Hazard Release Id : 383321
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1995-01-05 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 84.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Substance ID : 121192
Code : 205-99-2
Substance Name : BENZO(b)FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8477
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317390
Sub Alias Name : B(b)F
Substance Alias ID : 317391
Sub Alias Name : BENZ(e)ACEPHENANTHRYLENE
Substance Alias ID : 317392
Sub Alias Name : BENZFLUORANTHENE,3,4-
Substance Alias ID : 317393
Sub Alias Name : BENZOFLUORANTHENE,2,3-
Substance Alias ID : 317394
Sub Alias Name : BENZOFLUORANTHENE,3,4-
Sampling Result ID : 342820
Feature Id : Not reported
Hazard Release Id : 383322
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .80
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Sampling Result ID : 345626
Feature Id : Not reported
Hazard Release Id : 383322
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 120.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Substance ID : 121374
Code : 50-32-8
Substance Name : BENZO(a)PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8476
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318559
Sub Alias Name : B(a)P
Substance Alias ID : 318560
Sub Alias Name : BENZOPYRENE,3,4-
Substance Alias ID : 318561
Sub Alias Name : BENZPYRENE,3,4-
Substance Alias ID : 318562
Sub Alias Name : BP
Sampling Result ID : 342819
Feature Id : Not reported
Hazard Release Id : 383323
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 1.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Sampling Result ID : 345627
Feature Id : Not reported
Hazard Release Id : 383323
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 100.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121167
Code : 191-24-2

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Substance Name : BENZO(ghi)PERYLENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317305
Sub Alias Name : B(ghi)P
Substance Alias ID : 317306
Sub Alias Name : BENZOPERYLENE,1,12-
Substance Alias ID : 317307
Sub Alias Name : BENZPERYLENE,1,12-
Sampling Result ID : 342821
Feature Id : Not reported
Hazard Release Id : 383324
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .80
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Sampling Result ID : 345628
Feature Id : Not reported
Hazard Release Id : 383324
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 67.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121868
Code : 91-20-3
Substance Name : NAPHTHALENE
Substance Abbrev. : Not reported
Substance Categ ID : 8494
Substance Sub Categ : Semi-volatiles

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317793
Sub Alias Name : MOTH BALLS
Substance Alias ID : 317794
Sub Alias Name : NAPHTHENE
Substance Alias ID : 317795
Sub Alias Name : TAR CAMPHOR
Sampling Result ID : 342828
Feature Id : Not reported
Hazard Release Id : 383325
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 3.80
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 345629
Feature Id : Not reported
Hazard Release Id : 383325
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1995-01-05 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 5.30
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121176
Code : 193-39-5
Substance Name : INDENO(1,2,3-cd)PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8493
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317339

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Sub Alias Name : PHENYLENEPYRENE,2,3-
Substance Alias ID : 317340
Sub Alias Name : PHENYLENEPYRENE,o-
Sampling Result ID : 342827
Feature Id : Not reported
Hazard Release Id : 383326
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .60
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-1
Sampling Result ID : 345630
Feature Id : Not reported
Hazard Release Id : 383326
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1994-12-27 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 65.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121824
Code : 85-01-8
Substance Name : PHENANTHRENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317648
Sub Alias Name : PHENATHRIN
Sampling Result ID : 342829
Feature Id : Not reported
Hazard Release Id : 383327
Medium Code Id : 698
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Unit Code : 63
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 20.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : MW-2
Sampling Result ID : 345631
Feature Id : Not reported
Hazard Release Id : 383327
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : surface grab
Start Date : 1995-01-05 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 42.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Post-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121668
Code : 7440-43-9
Substance Name : CADMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8460
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319291
Sub Alias Name : CD
Sampling Result ID : 345632
Feature Id : Not reported
Hazard Release Id : 383328
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Max Concentration : 27.10
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Pre-dredging sample. Highest post-dredging concentration was 11 mg/kg.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121671
Code : 7440-47-3
Substance Name : CHROMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8462
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318145
Sub Alias Name : CHROMIUM, INORGANIC
Substance Alias ID : 319294
Sub Alias Name : CHROMIUM, TOTAL
Sampling Result ID : 345633
Feature Id : Not reported
Hazard Release Id : 383329
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 51.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Pre-dredging sample. Highest post-dredging concentration was 33 mg/kg.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121643
Code : 7439-97-6
Substance Name : MERCURY
Substance Abbrev. : Not reported
Substance Categ ID : 8467
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319260
Sub Alias Name : HG
Substance Alias ID : 319261
Sub Alias Name : HYDRARGYRUM
Substance Alias ID : 319262
Sub Alias Name : LIQUID SILVER

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

PORT OF PORTLAND - TERMINAL 4 (Continued)

EDR ID Number
EPA ID Number
Database(s)

U003580449

Substance Alias ID : 319263
Sub Alias Name : QUICKSILVER
Sampling Result ID : 342831
Feature Id : Not reported
Hazard Release Id : 383330
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 1.40
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Pre-dredging sample. Highest post-dredging concentration was 0.25 mg/kg.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121679
Code : 7440-66-6
Substance Name : ZINC
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319302
Sub Alias Name : ZN
Sampling Result ID : 342832
Feature Id : Not reported
Hazard Release Id : 383331
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 3690.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Pre-dredging sample. Highest post-dredging concentration was 960 mg/kg.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121614
Code : 72-54-8

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Substance Name : DDD,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319194
Sub Alias Name : DICHLORO-2,2-BIS(p-CHLOROPHENYL)ETHANE,1,1-
Substance Alias ID : 319195
Sub Alias Name : DICHLORODIPHENYLDICHLOROETHANE
Substance Alias ID : 319196
Sub Alias Name : RHOTHANE
Substance Alias ID : 319197
Sub Alias Name : TDE
Substance Alias ID : 319198
Sub Alias Name : TDE,p,p'-
Substance Alias ID : 319199
Sub Alias Name : TETRACHLORODIPHENYLETHANE
Sampling Result ID : 345635
Feature Id : Not reported
Hazard Release Id : 383332
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 14.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : Pre-dredging sample.
Quant. Released: unknown
Date: unknown
Update Date: 1997-01-04 00:00:00
Update By: Not reported
Substance ID : 121615
Code : 72-55-9
Substance Name : DDE,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319200
Sub Alias Name : BIS(p-CHLOROPHENYL)-1,1-DICHLOROETHYLENE,2,2-
Substance Alias ID : 319201
Sub Alias Name : DICHLORODIPHENYL DICHLOROETHYLENE,p,p'-
Substance Alias ID : 319202
Sub Alias Name : DICHLOROETHENYLIDENE)BIS(4-CHLOROBENZENE),1,1'-(-
Sampling Result ID : 345636
Feature Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Hazard Release Id : 383333
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : True
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 59.00
Last Update By : sxf
Last Updated On : 1997-04-01 00:00:00
Sample Comment : 59J ug/Kg Pre-dredging sample.

Alias Name: Hall-Buck Marine Inc.
Oregon Terminal Company (OTC)
OTC Gearlock Maintenance Facility (Former)
Quaker State Oil Co.
UPRR - Product Transfer Pipeline (Former)

Investigation Status: 207

NARR:

NARR ID: 5730614
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments Industrial. Residential properties within 100 meters of northeastern corner of project area.
Former street address: 9504 N Bradford St.
Coal tar pitch repeatedly spilled from shore-based crane and shoveled into river. Time of release: 3/28/86, 10/16/87, 6/18/97 (others possible). Apparent diesel fuel release from underground Union Pacific Railroad fuel-transfer pipeline. (Time of known releases Nov./Dec. 1970; others possible.) Various other apparent diesel fuel and oil releases (especially eastern portion of site) of unclear origin, but former UPRR fuel storage facility (ECSI #2017) is one likely source of petroleum actively seeping to river at Slip 3.
Coal tar pitch (pencil pitch) may be accumulating in river and sediments. Subsurface soils and shallow groundwater in fill material between Slip 3 and a Union Pacific Railroad fuel-transfer facility (ECSI #2017, to the east) are contaminated with #1 and #2 diesel fuels and oil. Contamination appears to extend into underlying natural alluvium. Free-product petroleum and petroleum-contaminated groundwater have been discharging to the river at Slip 3, and may be responsible for some of the sediment contamination in that area. Metals are also contaminants of concern in Slip 3 sediments. Pesticides were detected in some samples, but there is no known source of pesticides at Terminal 4. Zinc is associated with motor oil formulation and may be a concern, along with petroleum, for soil in the Quaker State tank farm area. Surface waters of Willamette River, sediments in river (aquatic organisms; consumers of fish). Potential trench-worker exposure to petroleum-contaminated subsurface soils and groundwater. The Port of Portland maintains a "Municipal"

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Water Right with
in the river at Terminal 4, although it has not been exercised for
drinking-water purposes. The most significant threat appears to be to aquatic
life in the river. There are residential properties within 100 meters of the NE
corner of the project ar
ea.
(1/31/91 MJZ/SAS) During one spill incident the cleanup crew was able to recover
only 1 gallon of material (pencil pitch) from surface water. The material
readily sinks and it is assumed that it sunk to the bottom of the river.
(3/24/97 SMF/SAS) 35,
000 cubic yards of pencil pitch contaminated sediments were removed and
transported to Ross Island Lagoon for burial during December 1994 - January 1995
(court-ordered removal action; lead agency: EPA). The Slip 3 cleanup criterium
was 0.5 percent p
encil pitch (maximum) remaining in Slip 3 sediments. An "interim" groundwater
remediation system was activated along the eastern edge of Slip 3 during
February 1993 to capture free product and contaminated groundwater before it
discharged to the riv
er. This groundwater remediation has not been capable of intercepting all free
product and contaminated groundwater discharging to Slip 3. (11/4/98 TER/VCP)
The Port drained and removed one of UPRR's abandoned pipelines in 1998.
Workplans for comple
ting remedial investigation of the upland area and sediments were submitted to
DEQ in August 1998. Site work was completed in October 1998. An interim action
to address ongoing petroleum seepage to Slip 3 has been proposed. (4/19/00
TER/VCP) Bioslur
ping interim action in place. Upland RI submitted. (9/26/00 TER/VCP) Upland risk
assessment submitted, sediment RI submitted, upland FS in preparation. (5/7/03
TER/VCS) FS completed in July 2002. Staff Report prepared and submitted for
comments by
EPA, trustees, the Port, and the public. The Record of Decision was signed in
April 2003. The proposed remedial action includes removal of NAPL and
contaminated groundwater through extraction wells and removal of contaminated
soil at the Slip 3 ri
verbank. The Port is conducting pilot testing for the remedial design.
PAHs in subsurface soils, groundwater, and Slip 3 sediments. Free-petroleum
product (#1 and #2 diesel fuel and oil) in subsurface soils and groundwater.
Metals (As, Ba, Cd, Cr, Cu, Hg, Pb, Ni, Ag, Sb, Zn) in Slip 3 sediments and
possibly in soils. D
DD and DDE in Slip 3 sediments. Potential for solvents in subsurface soils and
groundwater.
Surface water and food chain. Potential "trench-worker" exposure to petroleum
contaminated subsurface soils and groundwater. A "Municipal Drinking Water
Supply" water right within the river at Terminal 4, held by Port of Portland
COULD be exercised,
although the Port has no long-range plans to do so (water is currently used for
irrigation and washdown, so there is the potential to expose on-site workers to
contaminated surface water). Primary threat is believed to be to the river's
aquatic life
, and to consumers of fish caught from the river.
No on-site use of groundwater for drinking water. No well logs for domestic
water use within 0.5 mile, but nearby residences have not been field-verified.
Well logs indicate drinking water use at former Union Carbide/Oregon Steel Mills
site, althoug
h an EPA SI of that facility indicates that water there is used only for
industrial purposes now. The Port of Portland holds Municipal Drinking Supply
Water Rights along the Willamette River, but uses water for washdown purposes

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

only. River water supports migratory anadromous fish, resident fish, and migratory waterfowl populations. Pencil pitch (coal tar pitch) - polynuclear aromatic hydrocarbons (Slip 3). #1 and #2 diesel fuel (soils, groundwater, possibly in Slip 3 sediments). Oil (subsurface soils, groundwater, possibly in Slip 3 sediments). Metals (antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc) (Slip 3 sediments). DDE and DDD (Slip 3 sediments). Possibly solvents (subsurface soils). Tributyl tin (Slip 3 sediments and along waterfront). (1/31/91 MJZ/SAS) Pencil pitch (coal tar pitch) has repeatedly, over the years, been spilled into the water at Terminal 4's Slip 3, and has contaminated sediments. Pencil pitch is a suspected carcinogen that can harm humans through skin contact, inhalation, or ingestion. Pollution control experts say they know little about its effects on fish. Specific pencil pitch spills occurred 10/16/87, 3/28/86, and 6/18/97. (3/24/97 SMF/SAS) 35,000 cubic yards of pencil-pitch contaminated sediments were removed from Slip 3 (Removal Action - EPA lead agency; December 1994 through January 1995) under federal Consent Decree (May 1993). Confirmation sediment sampling after the 1994/95 removal indicated that significant PAH and metals contamination remained. Subsurface investigations on the upland portion of Terminal 4 also indicate extensive LNAPL contamination (as diesel fuel, with oil also detected in places), which has been discharging through active seeps to Slip 3 since 1971. The most recent pencil pitch spill (6/18/97) is estimated at 500 - 1,000 pounds and required additional cleanup. 35,000 cubic yards of contaminated sediments were dredged from Slip 3 and buried in Ross Island Lagoon (1994/1995). NWR DEQ WQ Source files; correspondence from owner and/or operator; complaint form; spill reports; Final Report for Slip 3 Sediment Dredging (April 1995); Terminal 4 Remedial Investigation Report, January 1994; other reports and contaminant data documented in 1998 Strategy Recommendation for site; Remedial Investigation Report, Terminal 4, Slip 3 Upland, January 21, 2000; Remedial Investigation Report, Terminal 4, Slip 3 Sediments, April 18, 2000.

NARR ID: 5730615
NARR Code : Disposals
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730616
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5728978
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5725899
NARR Code : Land Use (Current/Reasonably Likely)

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727908
NARR Code : Site Location
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727909
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727910
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727911
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727912
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: TROICK
Updated Date: 2003-05-07 10:50:54
NARR ID: 5727913
NARR Code : Substances of Concern
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727914
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727915
NARR Code : Water Use (Current/Reasonably Likely)
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 131695
Site Name: Port of Portland - Terminal 4
County Code : 26.00
Owner Name: Port of Portland - Terminal 4

FACA Id : 6848

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Owner Address: 11040 N Lombard ST
Portland, 97203
Lat/Long 45.6033 / -122.7730
Owner Code: LIS

PERMIT:

Permit Number:	Not reported	Permit Type:	Not reported
Permit Agency:	Not reported		
Permit Comments:	Not reported		

ADMIN ACT:

Admin ID:	710087	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-06-04 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1998-08-24 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	710088	Action ID:	9499
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-06-05 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1998-08-24 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	720160	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1990-07-27 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	26		
Comments :	Not reported		

Admin ID:	720169	Action ID:	9430
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-04-18 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	26		
Comments :	Not reported		

Admin ID:	720361	Action ID:	9445
Agency ID :	Dept Of Environmental Quality	Start Date:	1988-11-30 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2001-06-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Employee Id: Not reported
Comments : Not reported

Admin ID: 726129
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: GWISTAR
Created By: TROICK
Employee Id: 627
Comments : Not reported

Action ID: 9494
Start Date: 2002-05-07 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-06-11 09:59:09.
Create Date: 2003-05-07 10:43:56.

Admin ID: 726130
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: GWISTAR
Created By: TROICK
Employee Id: 627
Comments : Not reported

Action ID: 9469
Start Date: 2003-04-16 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-06-11 09:59:17.
Create Date: 2003-05-07 10:45:37.

Admin ID: 706551
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 627
Comments : Not reported

Action ID: 9491
Start Date: 1999-05-18 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2000-04-20 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711292
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: sxf
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9431
Start Date: 1997-04-02 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-06-09 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711794
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: GWISTAR
Created By: Not reported
Employee Id: 349
Comments : Adding evaluation of subsurface contamination east of Slip 3 to other documented concerns at site.

Action ID: 9459
Start Date: 1997-02-11 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2003-10-20 17:07:49.
Create Date: 2002-12-17 08:50:22.

Admin ID: 711801
Agency ID : Dept Of Environmental Quality
Further Action: Not reported

Action ID: 9451
Start Date: 1996-12-17 00:00:00
Region ID: Northwestern Region

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Listing comments from Hall-Buck Marine, Inc. (Marie E. Krien-Schmidt)

Substance Code: SAS
Cleanup Flag: False
Update Date: 2001-06-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711802
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Listing comments recieved from Port of Portland (Kathi Futornick)

Action ID: 9451
Start Date: 1997-01-09 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2001-06-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711835
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Review of Terminal 4 listing comments from Hall-Buck Marine and the Port of Portland.

Action ID: 9448
Start Date: 1997-01-23 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-03-25 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711836
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Listing to include both Slip 3 sediment contamination and subsurface petroleum contamination at Terminal 4

Action ID: 9488
Start Date: 1997-04-01 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-03-25 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711837
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Listing to include both Slip 3 sediment contamination and subsurface petroleum contamination at Terminal 4

Action ID: 9489
Start Date: 1997-04-01 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-03-25 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 722588
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported

Action ID: 9465
Start Date: 1991-03-25 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Employee Id: 26
Comments : Not reported

Admin ID:	722589	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-03-25 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	26		
Comments :	Not reported		

Admin ID:	722590	Action ID:	9451
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-06-10 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Letter from Hall-Buck Marine dated 6/3/91		

Admin ID:	722591	Action ID:	9451
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-05-14 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Letter from Richard D. Bach dated 5/13/91		

Admin ID:	718236	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1988-08-17 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2001-06-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	304		
Comments :	Not reported		

Admin ID:	723185	Action ID:	9444
Agency ID :	Environmantal Protection Agency	Start Date:	1990-09-28 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	708050	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-09-08 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Cleanup Flag: False
Update Date: 1998-09-08 00:00:00
Create Date: 2002-12-17 08:50:22.
Comments : 3rd and Final proposal to list letter sent to Owner/Operators

Admin ID: 708051
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Action ID: 9467
Start Date: 1998-09-08 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-09-08 00:00:00
Create Date: 2002-12-17 08:50:22.
Comments : 3rd and Final proposal to list letter sent to Owner/Operators

Admin ID: 708413
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Action ID: 9451
Start Date: 1998-10-27 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-10-29 00:00:00
Create Date: 2002-12-17 08:50:22.
Comments : Comments received from Marie E. Krien-Schmidt, Kinder Morgan Bulk Terminals.

Admin ID: 708472
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 627
Action ID: 9484
Start Date: 1998-08-01 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-06-13 00:00:00
Create Date: 2002-12-17 08:50:22.
Comments : Upland RI.

Admin ID: 708488
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Action ID: 9451
Start Date: 1998-10-29 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-11-10 00:00:00
Create Date: 2002-12-17 08:50:22.
Comments : Comments received from Padraic W. Quinn; Port of Portland

Admin ID: 708523
Agency ID : Environmantal Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: sxf
Created By: Not reported
Employee Id: Not reported
Action ID: 9509
Start Date: 1993-05-01 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1998-11-20 00:00:00
Create Date: 2002-12-17 08:50:22.
Comments : Pencil Pitch contaminated sediment removal (Consent Decree)

Admin ID: 713119
Action ID: 9431

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Agency ID :	Dept Of Environmental Quality	Start Date:	1996-09-05 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	gmw	Update Date:	1997-12-05 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	711		
Comments :	Hold for VCS review		

Admin ID:	713477	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1996-11-26 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1996-11-26 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	711		
Comments :	Headsup letter giving an additional 45 days to comment on proposed listing issued on November 26, 1996.		

Admin ID:	713478	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1996-11-26 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1996-11-26 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	711		
Comments :	Headsup letter giving an additional 45 days to comment on proposed listing issued on November 26, 1996.		

Admin ID:	718843	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1989-05-04 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	466		
Comments :	Not reported		

Admin ID:	718844	Action ID:	9496
Agency ID :	Dept Of Environmental Quality	Start Date:	1989-05-05 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	466		
Comments :	Not reported		

Admin ID:	723852	Action ID:	9437
Agency ID :	Dept Of Environmental Quality	Start Date:	1990-07-27 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Created By: Not reported
Employee Id: 26
Comments : Not reported

Create Date: 2002-12-17 08:50:22.

Admin ID: 723853
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9428
Start Date: 1991-04-18 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 723854
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 2319
Comments : Not reported

Action ID: 9448
Start Date: 1991-06-25 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 724119
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 2319
Comments : Not reported

Action ID: 9488
Start Date: 1991-06-25 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 724234
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 26
Comments : Not reported

Action ID: 9499
Start Date: 1990-07-27 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 724235
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 2319
Comments : Not reported

Action ID: 9489
Start Date: 1991-06-25 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 724448
Agency ID : Dept Of Environmental Quality
Further Action: Not reported

Action ID: 9456
Start Date: 1990-02-22 00:00:00
Region ID: Headquarters

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: kpd Update Date: 1998-04-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 26
Comments : Recommend NFA for state program. (DNFA 4/22/90)

Admin ID: 704278 Action ID: 9486
Agency ID : Dept Of Environmental Quality Start Date: 1999-03-12 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: jmw Update Date: 2001-06-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 627
Comments : Upland RA.

Admin ID: 704279 Action ID: 9429
Agency ID : Dept Of Environmental Quality Start Date: 2000-10-18 00:00:00
Further Action: 0 Region ID: Northwestern Region
Complete Date: 0 Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: TROICK Update Date: 2003-05-07 10:44:32.
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 627
Comments : Upland FS.

Admin ID: 708900 Action ID: 9438
Agency ID : Dept Of Environmental Quality Start Date: 1999-03-01 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: kvp Update Date: 1999-03-01 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 730
Comments : Not reported

Admin ID: 708901 Action ID: 9439
Agency ID : Dept Of Environmental Quality Start Date: 1999-03-01 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: kvp Update Date: 1999-03-01 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 730
Comments : Not reported

Admin ID: 713733 Action ID: 9421
Agency ID : Environmental Protection Agency Start Date: 1989-05-03 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: Not reported
Rank Value: 0 Cleanup Flag: False
Updated By: jmw Update Date: 2001-06-14 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: Not reported
Comments : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

DISPOSAL:

Disposal ID:	2354	Feature ID:	Not reported
Medium :	Sediment		
Treatment :	Not reported		
Disposal Method:	Other Disposal		
Start Date:	1994-12-19 00:00:00	End Date:	1995-01-07 00:00:00
Disposal Flag:	False	Disposal Qty:	35000.0000
Unit Code:	Not reported		
Depth :	-50 to -22 feet		
Monitor :	None		
Manifest Num :	(NONE)		
Removed By :	Not reported		
Loc Comments:	Ross Island Lagoon - burial		
Disposal Sub ID:	533		
Substance ID:	122002		
Created By:	Not reported		
Create Date:	2002-12-17 08:51:23.		

FEATURE:

Feature Id :	Not reported
Site Id :	Not reported
Feature Code :	Not reported
Relative Position :	Not reported
Hazard Rel Id :	Not reported
Region Code :	Not reported
Lat Long Method :	Not reported
Lat Long Source :	Not reported
County Code :	Not reported
Reference Id :	Not reported
Twnshp Coord :	Not reported
Township Zone :	Not reported
Range Coord :	Not reported
Range Zone :	Not reported
Section Coord :	Not reported
Qtr Section Coord :	Not reported
Address :	Not reported
Zip Plus :	Not reported
Lat/Long :	Not reported
Lat/Lon Decimal :	Not reported
Feature Size :	Not reported
Est Accuracy :	Not reported
Created On Date :	Not reported
Created By Prgm :	Not reported
Last Updated By :	Not reported
Last Updated On :	Not reported
Comment :	Not reported

WELL:

Well ID:	Not reported
Water Resource Code:	Not reported
Effective Date:	Not reported
Aquifer Code:	Not reported
Ground Station Key:	Not reported

OPERATIONS:

Operation Id :	131695
Operation Status :	Active

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 (Continued)

U003580449

Common Name : Port of Portland - Terminal 4
Yrs of Operation : pre 1924 to present (acquired 1920)
Comments : pre 1924 to present (acquired 1920)
Updated By : sxf
Updated Date : 1998-01-12 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 195341
SIC Code: 4491
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR CRL:

Facility ID: 272
Location ID: 6848
Status Code: LIS
Facility Status: REMEDIAL ACTION
Lat/Long: 45.6033 / -122.773

UST:

Facility ID: 445
Facility Telephone: (503) 460-4331
Permittee Name: Chuck Shenk
Active Tanks: Not reported
Decommissioned Tanks: 3
Number of Permitted Tanks: 3
Number of Upgraded Tanks: Not reported

A2
ENE
1/4-1/2
2219 ft.

UPRR - ST. JOHNS TANK FARM
6908 N ROBERTS AVENUE
PORTLAND, OR 97203

SHWS - ECSI S105710719
OR VCS N/A

Site 1 of 2 in cluster A

Relative:
Higher

ECSI:

State ID Number: 2017
Study Area: False
Cercis ID: Not reported
Size: 2.36 acres
Orphan: False
Lat/Long: 45.6020 / -122.769
Township Coord.: 1.00
Range Coord.: 1.00
Section Coord.: 2
Legislative : 2
FACA ID : 40521
Update Date : 2003-12-09 16:39:58.
Created Time : 1997-03-24 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: 3 and 43
NPL: False
Region ID: 2
Tax Lots: 3 and 43
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 256
Score Value: 0
Created Date: jmd

Actual:
89 ft.

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: 2000-02-15 00:00:00
Update By: Not reported
Substance ID : 121989
Code : ECD200
Substance Name : OIL OR FUEL RELATED COMPOUNDS

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UPRR - ST. JOHNS TANK FARM (Continued)

S105710719

Substance Abbrev. : Not reported
Substance Categ ID : 8532
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 339304
Feature Id : Not reported
Hazard Release Id : 382514
Medium Code Id : 704
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1985-06-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-02-28 00:00:00
Sample Comment : O&G 7.9 - 40.5 ug/L
Sampling Result ID : 339305
Feature Id : Not reported
Hazard Release Id : 382514
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1985-06-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-02-28 00:00:00
Sample Comment : O&G 200 - 51,200 mg/kg

Alias Name: Union Pacific RR - St. Johns Tank Farm
UPRR - Product Transfer Pipeline (Former)
UPRR Fuel Loading Facility (Former)

Investigation Status: 207

NARR:

NARR ID: 5736706
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments soil and possibly groundwater

(10/2/99 JMW/SAP) UPRR elected to join VCP after receiving a further-action letter from the Site Assessment Program. (6/12/01 TER/VCP) On May 4, 2001, UPRR

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

UPRR - ST. JOHNS TANK FARM (Continued)

S105710719

submitted a revised Site Investigation (SI) work plan to VCP for review of additional soil and groundwater investigation. (11/5/02 TER/VCP) Field work was completed in June and July 2001. UPRR is preparing a report. Former fueling platforms, tanks, and associated structures were demolished in July 2001. A sump with surrounding petroleum-contaminated soil was removed. UPRR is completing another phase of soil and groundwater investigation. Potential human exposure to contaminants through inhalation, ingestion, or direct contact with contaminated soil. Potential release to the storm water system that flows to the Willamette River.

NARR ID: 5736707
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736708
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133291 FACA Id : 40521
Site Name: UPRR - St. Johns Tank Farm
County Code : 26.00
Owner Name: Chevron Fuel Storage and Loading
Owner Address: 6908 N Roberts Avenue
Portland, 97203

Lat/Long 45.6020 / -122.7690
Owner Code: LIS

Owner Site Num: 133292 FACA Id : 40521
Site Name: UPRR - St. Johns Tank Farm
County Code : 26.00
Owner Name: Chevron Fuel Storage and Loading
Owner Address: 6908 N Roberts Avenue
Portland, 97203
Lat/Long 45.6020 / -122.7690
Owner Code: LIS

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 705729 Action ID: 9519
Agency ID : Dept Of Environmental Quality Start Date: 1999-10-21 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 7 Cleanup Flag: False
Updated By: jmw Update Date: 2000-02-08 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 313
Comments : Not reported

Admin ID: 705730 Action ID: 9459

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UPRR - ST. JOHNS TANK FARM (Continued)

S105710719

Agency ID :	Dept Of Environmental Quality	Start Date:	1999-05-06 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-01-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22
Employee Id:	2030		
Comments :	Not reported		

Admin ID:	705733	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	2000-01-04 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-01-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22
Employee Id:	2030		
Comments :	Not reported		

Admin ID:	705734	Action ID:	9499
Agency ID :	Dept Of Environmental Quality	Start Date:	2000-01-04 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-01-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22
Employee Id:	2030		
Comments :	Not reported		

Admin ID:	706019	Action ID:	9442
Agency ID :	Dept Of Environmental Quality	Start Date:	2000-02-02 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2001-06-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22
Employee Id:	627		
Comments :	Not reported		

Admin ID:	710441	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-03-24 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-11-02 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22
Employee Id:	349		
Comments :	Not reported		

Admin ID:	700485	Action ID:	9470
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-05-06 00:00:00
Further Action:	High	Region ID:	Northwestern Region
Complete Date:	256	Substance Code:	SAS
Rank Value:	90	Cleanup Flag:	False
Updated By:	GWISTAR	Update Date:	2003-05-15 15:39:08
Created By:	Not reported	Create Date:	2002-12-17 08:50:22
Employee Id:	2030		

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

UPRR - ST. JOHNS TANK FARM (Continued)

S105710719

Comments : Not reported

Admin ID: 706401
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9465
Start Date: 2000-03-29 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-03-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 706402
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9467
Start Date: 2000-03-29 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-03-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711799
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmd
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9424
Start Date: 1997-03-24 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-03-24 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707637
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9439
Start Date: 2000-05-31 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-06-01 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707638
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9438
Start Date: 2000-05-31 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-06-01 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 704280
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0

Action ID: 9440
Start Date: 2000-03-01 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UPRR - ST. JOHNS TANK FARM (Continued)

EDR ID Number
EPA ID Number

Database(s)

S105710719

Updated By: jmw
Created By: Not reported
Employee Id: 627
Comments : Not reported

Update Date: 2001-06-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 704281
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 627
Comments : Not reported

Action ID: 9511
Start Date: 2000-03-01 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-06-13 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

UPRR - ST. JOHNS TANK FARM (Continued)

S105710719

Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133291
Operation Status :Inactive
Common Name : Chevron Fuel Storage and Loading
Yrs of Operation : 1924 - 1983
Comments : 1924 - 1983
Updated By : jmw
Updated Date : 2000-02-15 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196436
SIC Code: 4226
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operations SIC Id:196437
SIC Code: 2999
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operations SIC Id:196438
SIC Code: 4013
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operations SIC Id:196440
SIC Code: 4613
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operation Id : 133292
Operation Status :Inactive
Common Name : Chevron Fuel Storage and Loading
Yrs of Operation : 1924 - 1983
Comments : 1924 - 1983
Updated By : jmw
Updated Date : 2000-02-15 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196441
SIC Code: 2999
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:196442

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UPRR - ST. JOHNS TANK FARM (Continued)

S105710719

SIC Code: 4013
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:196443
SIC Code: 4226
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:196444
SIC Code: 4613
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:196445
SIC Code: 5171
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 2017
Action: SI
Start Date: 03/01/20
End Date: Not reported
Program: VCS
CRL: LIS
Facility Size: 2.36 acres
Project Manager Last Name: Roick
Project Manager First Name: Thomas

A3
ENE
1/4-1/2
2219 ft.

UPRR - ST. JOHNS TANK FARM
6908 N ROBERTS AVENUE
PORTLAND, OR 97203

OR CRL S104495030
N/A

Site 2 of 2 in cluster A

Relative:
Higher

OR CRL:

Actual:
89 ft.

Facility ID: 2017
Location ID: 40521
Status Code: LIS
Facility Status: SITE INVESTIGATION
Lat/Long: 45.602 / -122.769

B4
WSW
1/2-1
2649 ft.

COLUMBIA RIVER SAND & GRAVEL
10504 NW ST HELENS ROAD
PORTLAND, OR 97231

SHWS - ECSI 1004580026
FINDS 110009699674
OR VCS

Site 1 of 2 in cluster B

Relative:
Higher

FINDS:

Actual:
48 ft.

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality
Permit Compliance System

ECSI:

State ID Number: 2351
Study Area: False
Cercis ID: Not reported
Size: 25.48 acres
Orphan: False
Lat/Long: 45.5977 / -122.782
Township Coord.: 1.00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: 111
NPL: False
Region ID: 2
Tax Lots: 111
Township Zone: N

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

COLUMBIA RIVER SAND & GRAVEL (Continued)

1004580026

Range Coord.:	1.00	Range Zone:	W
Section Coord.:	2	Qtr Section:	Not reported
Legislative :	2	Further Action:	256
FACA ID :	14792	Score Value:	73
Update Date :	2003-11-26 13:31:50.	Created Date:	jmw
Created Time :	1999-05-25 00:00:00		

HAZ RELEASED:

Quant. Released:	Not reported
Date:	Not reported
Update Date:	Not reported
Update By:	Not reported
Substance ID :	Not reported
Code :	Not reported
Substance Name :	Not reported
Substance Abbrev. :	Not reported
Substance Categ ID :	Not reported
Substance Sub Categ :	Not reported
Category Level :	Not reported
Created By :	Not reported
Create Date :	Not reported
Substance Alias ID :	Not reported
Sub Alias Name :	Not reported
Sampling Result ID :	Not reported
Feature Id :	Not reported
Hazard Release Id :	Not reported
Medium Code Id :	Not reported
Substance Id :	Not reported
Unit Code :	Not reported
Observation :	Not reported
Owner Operator :	Not reported
Lab Data :	Not reported
Sample Depth :	Not reported
Start Date :	Not reported
End Date :	Not reported
Minimum Concentration :	Not reported
Max Concentration :	Not reported
Last Update By :	Not reported
Last Updated On :	Not reported
Sample Comment :	Not reported

Alias Name: Linnton Plywood Association (ECSI 2373)
Investigation Status: 208

NARR:

NARR ID: 5744294
NARR Code : General Site Description
Created By: DPETTIT
Create Date: 2003-10-20 14:53:33
Updated By: DPETTIT
Updated Date: 2003-10-20 14:53:33

NARR Comments (10/1/99 TB/SAP) Site included in Strategy Recommendation for Linnton Plywood Association (property owner) SEE ECSI #2373.
Columbia River Sand & Gravel is operated on property owned by Linnton Plywood Association. The Pre-RI assessment of this property was conducted concurrently with ECSI 2373 - Linnton Plywood Association. For information on the Pre-RI evaluation, see the Linnton Plywood Association project file.

NARR ID: 5738312

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

COLUMBIA RIVER SAND & GRAVEL (Continued)

EDR ID Number
EPA ID Number

Database(s)

1004580026

NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133546 FACA Id : 14792
Site Name: Columbia River Sand & Gravel Inc.
County Code : 26.00
Owner Name: Columbia River Sand & Gravel Inc.
Owner Address: 10504 NW St. Helens Rd
Portland, 97231
Lat/Long 45.5977 / -122.7828
Owner Code: SUS

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 707004 Action ID: 9424
Agency ID : Dept Of Environmental Quality Start Date: 1999-05-25 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: jmw Update Date: 1999-05-25 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 313
Comments : Not reported

Admin ID: 707006 Action ID: 9508
Agency ID : Dept Of Environmental Quality Start Date: 1999-05-25 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: jmw Update Date: 1999-10-14 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 349
Comments : *SEE REMEDIAL ACTION NARRATIVE

Admin ID: 727468 Action ID: 9425
Agency ID : Dept Of Environmental Quality Start Date: 2001-10-01 00:00:00
Further Action: High Region ID: Northwestern Region
Complete Date: 256 Substance Code: VCS
Rank Value: Not reported Cleanup Flag: True
Updated By: DPETTIT Update Date: 2003-10-20 15:01:43.
Created By: DPETTIT Create Date: 2003-10-20 15:00:27.
Employee Id: 593
Comments : Site evaluated concurrently with Linnton Plywood Association (property owner)
solely for potential sources of contamination to the Willamette River under
Portland Harbor Pre-RI Agreement.

DISPOSAL:

Disposal ID: Not reported Feature ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

COLUMBIA RIVER SAND & GRAVEL (Continued)

1004580026

Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		

FEATURE:

Feature Id :	Not reported
Site Id :	Not reported
Feature Code :	Not reported
Relative Position :	Not reported
Hazard Rel Id :	Not reported
Region Code :	Not reported
Lat Long Method :	Not reported
Lat Long Source :	Not reported
County Code :	Not reported
Refrence Id :	Not reported
Twtnshp Coord :	Not reported
Township Zone :	Not reported
Range Coord :	Not reported
Range Zone :	Not reported
Section Coord :	Not reported
Qtr Section Coord :	Not reported
Address :	Not reported
Zip Plus :	Not reported
Lat/Long :	Not reported
Lat/Lon Decimal :	Not reported
Feature Size :	Not reported
Est Accuracy :	Not reported
Created On Date :	Not reported
Created By Prgm :	Not reported
Last Updated By :	Not reported
Last Updated On :	Not reported
Comment :	Not reported

WELL:

Well ID:	Not reported
Water Resource Code:	Not reported
Effective Date:	Not reported
Aquifer Code:	Not reported
Ground Station Key:	Not reported

OPERATIONS:

Operation Id :	133546
Operation Status :	Active
Common Name :	Columbia River Sand & Gravel Inc.
Yrs of Operation :	unknown
Comments :	unknown
Updated By :	jmw
Updated Date :	1999-05-25 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

COLUMBIA RIVER SAND & GRAVEL (Continued)

EDR ID Number
EPA ID Number

Database(s)

1004580026

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196782
SIC Code: 1400
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 2351
Action: EV
Start Date: 10/01/20
End Date: Not reported
Program: VCS
CRL: SUS
Facility Size: 25.48 acres
Project Manager Last Name: Pettit
Project Manager First Name: Don

B5
WSW
1/2-1
2649 ft.

LINNTON PLYWOOD ASSOCIATION
10504 NORTHWEST SAINT HELENS ROAD
PORTLAND, OR 97231

SHWS - ECSI 1004580411
FINDS ORD009023060
RCRIS-LQG
OR VCS

Site 2 of 2 in cluster B

Relative:
Higher

RCRIS:
Owner: LINNTON PLYWOOD ASSOCIATION
(503) 286-3672
EPA ID: ORD009023060
Contact: JIM STAHLY
(503) 286-3672

Actual:
48 ft.

Classification: Large Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Aerometric Information Retrieval System/AIRS Facility Subsystem
National Emissions Inventory
National Emissions Trends
National Toxics Inventory
Oregon Department of Environmental Quality
Resource Conservation and Recovery Act Information system
Toxics Release Inventory

ECSI:

State ID Number:	2373	Brown ID	0
Study Area:	False	Coordinator Supplier:	GWISTAR
Cerclis ID:	Not reported	Tax Lots:	111
Size:	26.5 acres	NPL:	False
Orphan:	False	Region ID:	2
Lat/Long:	45.5989 / -122.782	Tax Lots:	111
Township Coord.:	1.00	Township Zone:	N
Range Coord.:	1.00	Range Zone:	W
Section Coord.:	2	Qtr Section:	Not reported
Legislative :	2	Further Action:	256

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

FACA ID : 4972 Score Value: 73
Update Date : 2004-01-14 12:24:53. Created Date: jmw
Created Time : 1999-06-14 00:00:00

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-10 00:00:00
Update By: Not reported
Substance ID : 122002
Code : ECD243
Substance Name : POLYAROMATIC HYDROCARBONS (PAH)
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318143
Sub Alias Name : PAH
Substance Alias ID : 318148
Sub Alias Name : POLYCYCLIC AROMATIC HYDROCARBONS (PAH)
Substance Alias ID : 318149
Sub Alias Name : POLYNUCLEAR AROMATIC HYDROCARBINS (PNA)
Substance Alias ID : 318150
Sub Alias Name : PNA
Sampling Result ID : 340763
Feature Id : Not reported
Hazard Release Id : 382152
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1998-06-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-10-12 00:00:00
Sample Comment : LPAHs 62,190 ppb
Sampling Result ID : 340764
Feature Id : Not reported
Hazard Release Id : 382152
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1998-06-02 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

Last Updated On : 1999-10-12 00:00:00
Sample Comment : HPAHs 152,700 ppb
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-10 00:00:00
Update By: Not reported
Substance ID : 121045
Code : 132-64-9
Substance Name : DIBENZOFURAN
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316997
Sub Alias Name : DIPHENYLENE OXIDE
Sampling Result ID : 340765
Feature Id : Not reported
Hazard Release Id : 382153
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1998-06-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-10-12 00:00:00
Sample Comment : 470 ppb
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-02-11 00:00:00
Update By: Not reported
Substance ID : 121830
Code : 86-74-8
Substance Name : CARBAZOLE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 340832
Feature Id : Not reported
Hazard Release Id : 382211
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

Lab Data : True
Sample Depth : Not reported
Start Date : 1998-06-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-11-02 00:00:00
Sample Comment : 280 ppb

Alias Name: Portland Harbor Sediment Study
Investigation Status: 208

NARR:

NARR ID: 5738422
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: GWISTAR
Updated Date: 2003-11-20 13:44:15

NARR Comments Weston sampling results from the Portland Harbor Sediment Study revealed PAHs, 2-methylnaphthalene, dibenzofuran, mercury, zinc, and carbazole in river sediments adjacent to the site. Pre-RI assessment activities focused solely on sources with potential connection to the Willamette River (riverbank groundwater, surface soils, and catch basin sediments). The key sources/pathways identified were riverbank soils in areas where disposal or discharges have occurred, the discharge of groundwater that may have been impacted by historic releases, and the transport of catch basin sediments and contaminated soil entrained in stormwater to the river via stormwater collection and discharge. The Chemicals of Interest (COIs) identified for the site were: TPH, PCBs, heavy metals, and SVOCs in catch basin sediment or soil entrained in stormwater runoff; and TPH, SVOCs, heavy metals, and volatile organic compounds (VOCs) in riverbank groundwater/soils. Groundwater samples were collected in October 2001 from key areas along the riverbank. The samples were collected using a temporary well screen installed with driven-point technique. Due to the presence of silt in the formation, sample volumes collected were limited, and non-turbid samples could not be collected from the temporary well screens. Groundwater samples were tested for COIs. Some samples collected during the October 2001 sampling event, without field-filtering, contained metals and phthalates concentrations slightly above applicable screening criteria. A second groundwater sampling event was conducted in October 2002, using field-filtered groundwater samples (collected adjacent to the Maintenance Shop, Steam Cleaning, Green End and Wigwam Burner) to determine whether sediment (entrained in unfiltered samples collected in 2001) may have biased the analytical results. Based on a comparison of the October 2002 groundwater data to the October 2001 sample results, the DEQ agrees with CH2M Hill's conclusion that elevated concentrations of some metals and phthalates were biased high (by 1 to 2 orders of magnitude) because of sediment in the original samples. With one exception (the duplicate sample collected at the Steam Cleaning Area), all samples from October 2002 contained copper, lead, and phthalates below the method detection limit or conservative contaminant screening values for ecological receptors in

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

LINTON PLYWOOD ASSOCIATION (Continued)

1004580411

freshwater (DEQ Ambient Water Quality Criteria (AWQC) or Level II Ecological Screening Level Values (SLV)). The low concentrations of lead in the samples from the Steam Cleaning Area (1.61 and 4.12 ug/l in the duplicate) are only slightly above conservative screening values (DEQ Level II SLVs) for freshwater and are below typical background concentrations for inorganic contaminants in freshwater even before attenuation and/or dilution when mixing with surface water. Based on the evaluation of the groundwater pathway, contaminant concentrations documented in site groundwater are not indicative of an active source that could degrade Willamette River sediment or water quality. Initial samples of sediment were collected from site catch basins (associated with Outfalls 2, 3, and 3a) and from soil/sediment beneath stormwater outfalls (Outfalls 5 and 6) at the site in October 2001. The samples were tested for COIs and were intended to provide information on the types of contaminants released at the active facility and the maximum concentrations that could be contributed to river sediments via the stormwater pathway in the absence of any site controls. Initial sediment samples contained detectable concentrations of chromium, copper, lead, zinc, petroleum hydrocarbons, halogenated hydrocarbons, phthalates, polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls. After receipt of the analytical results, LPA installed filters in all catch basins to reduce the amount of particulate passing through the system. Most contaminants are expected to decrease due to the shutdown of LPA operations in December 2001. Initial samples of Outfall 5 surface soils (at base of outfall discharge area) contained petroleum (primarily diesel-range hydrocarbons at 1,270 to 1,820 mg/kg), low levels of chlorinated hydrocarbons, and elevated metals. LPA proposed further evaluation of Outfall 5 after removal of visibly stained material. The soil samples collected at Outfall 6 (October 2001 and October 2002) to evaluate potential contribution via the stormwater pathway contained PAHs, cadmium, copper, and lead above DEQ Level II sediment SLVs and/or background concentrations for terrestrial soils. Sediment samples collected from Catch Basins 2, 3, and 3A contained copper above DEQ Level II sediment SLVs. Isopropyltoluene and toluene were detected at low concentrations in Catch Basins 3 and 3A. There are no ecological toxicity criteria to evaluate these compounds in a sediment matrix. PCBs were also detected, but below DEQ Level II sediment SLVs. An attempt to collect sediment samples from Catch Basins 2, 3 and 3A was made in October 2002 to evaluate the effectiveness of stormwater treatment using catch-basin filters. No sediment had accumulated, due to the regular maintenance of the catch basins and the cessation of site operations. The sample collected adjacent to Outfall 6 in October 2001 was composed of buff-colored, silt-sized fragments with moderate plasticity. This material was found in the Outfall 6 sediment and selected for sampling based on the fact that it appeared to be a waste product. The material was not representative of sediment in the vicinity of the outfall. Although the origin of the material is uncertain (Outfall 6 drains the north side of the LPA facility and several upgradient properties), comparison to samples of waste media collected in October 2002 from the north side of the facility indicate the material may have originated from the boiler or air-treatment scrubber. During

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

an attempt to collect a second sample of the material at the outfall in October 2002, the material could not be located. A sample collected beneath the outfall contained PAHs and metals at about two orders of magnitude lower than in the 2001 sample. However, these chemicals were still present, essentially at the screening level and/or background concentrations. It is unclear if this represents residual contamination after most material observed in 2001 had been transported away from the riverbank, or contamination that is representative of a steady-state release of contaminants from the outfall. However, when compared to toxicity-based screening level values based on "probable effects concentrations" (PECs), the residual or steady-state concentrations of contaminants in Outfall 6 sediments do not represent a threat to sediment quality in Portland Harbor. LPA operated and conducted monitoring under a General Discharge Permit (1200Z) for the discharge of stormwater to the Willamette River. Although runoff of stormwater from the LPA facility does not currently appear to be a threat at present, ongoing source-control measures (catch basin filter maintenance and cleaning) will be necessary to protect sediment and/or water quality in the Willamette River, especially as the site is put back into productive use. During the shutdown of LPA operations, unused products and wastes were disposed of at off-site facilities. During this process, a pile of knife-grinding debris was discovered in a level area between the Green End and the riverbank in an area of overgrown shrubs. The pile was distinct in color/texture and appeared to have accumulated in place due to historic discharges from a pipe emanating from the Green End. The material was tested for heavy metals and TPH, and confirmed to be composed primarily of chromium and iron, with low concentrations of residual heavy oil. Although this material was not identified as having a direct pathway to the Willamette River, the pile was removed during plant closure, and the residual contamination was evaluated due to the relative proximity to the riverbank. Through work performed to complete the remedial investigation at the Arco/BP Terminal 22T (Arco/BP 22T) facility located immediately south of the LPA facility, gasoline-impacted groundwater was discovered in the extreme southeast corner of the LPA site (in the area of the groundwater sample collected during the initial phase of evaluation). Gasoline (and related constituents) have been documented in groundwater immediately adjacent to this area at the Arco/BP 22T facility, though at somewhat lesser concentrations. TPH-Gx contamination in groundwater at the southernmost portion of the LPA site (the CRS&G site) is not considered an on-site source of contamination at the LPA site because, at least preliminarily, it appears that the source of the contamination is likely from the adjacent Arco/BP station. Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for US EPA, 5/98. Pre-Remedial Investigation Assessment Report, prepared by CH2MHill, 2/02. Enhancement Sampling for Pre-Remedial Investigation (Report), prepared by CH2MHill, 12/02. Summary of Outfall 5 and Knife-Grinding Area Removal Actions (letter report), prepared by CH2MHill, 7/17/03. Summary of Additional Outfall 5 Removal Action (letter report), prepared by CH2MHill, 7/23/03. Willamette River sediments. (6/14/99 JMW/SAP) Based on initial sampling results from a river sediment

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

quality study, the Linnton Plywood Association property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on February 12, 1999. A response from Linnton Plywood was received on April 12, 1999. A site screening is scheduled (level 1 priority). (10/1/99 TG/SAS) Strategy Recommendation for a high-priority Remedial Investigation. (3/1/00 JMW/SAP) Voluntary Agreement for Remedial Investigation and Source Control Measures forwarded to Linnton Plywood Associates on February 29, 2000. Signed agreement due by March 31, 2000.

The Linnton Plywood Assoc. (LPA) property was initially developed by Clark and Wilson Lumber Company on properties acquired between 1905 and 1929 and was the site of a sawmill. Most of the site was used for storage of raw logs and finished products, with the mill located on the southern portion of the property. A fire destroyed the sawmill in 1947 and the site was used for storage until development of the plywood mill at the northern end of the property began in the early 1950s. LPA began site operations in 1951 under lease of the property and purchased the subject property in 1971 from the Spokane, Portland & Seattle Railway Company and Burlington Northern Railroad. LPA operated on the northern portion of the subject site until plant shutdown in December 2001. LPA manufactured plywood and used phenol-formaldehyde resin, sodium hydroxide, and petroleum hydrocarbons such as oil, diesel, and kerosene. The area of the former Clark and Wilson Lumber Company saw mill was not redeveloped after destroyed by fire and remained unused until leased by CRSG in 1994. CRSG barges clean sand from the Columbia River to the LPA site for redistribution onto trucks. Water separated from the sands after off-loading is collected in several ponds at the site and discharged to the Willamette River under a National Pollutant Elimination System permit (NPDES Permit #101295) issued by the DEQ Water Quality Program. In Fall 1997, an investigation of sediments in a 5.6-mile stretch of the Willamette River (known as the Portland Harbor) was conducted by the DEQ and US-EPA. Three shallow samples and one deeper sample were collected from sediments adjacent to the LPA and CRSG site. Polynuclear aromatic hydrocarbons (PAHs) and heavy metals were detected in the samples. In June 2000, LPA entered into a Voluntary Agreement for Department oversight of a Pre-Remedial Investigation (Pre-RI) to evaluate all potential current sources of contaminants to the Portland Harbor from upland sources. The objectives of the Pre-RI, as described in the June 2000 Voluntary Agreement, were to: 1. Identify and characterize all upland hazardous substance source areas at the facility; 2. Evaluate all contaminant migration pathways at the facility; 3. Determine the nature, extent, and distribution of hazardous substances in affected media at the facility; and 4. Identify all current and reasonably likely future human and ecological receptors at the facility. The Pre-RI was not designed to evaluate all potential sources of contaminants at the LPA facility, nor does it reach conclusion with respect to risks to human health or the environment associated with pathways other than those having connection to the Willamette River and/or riverbank sediments. Historical and Current Site Use Evaluation Prior to beginning the Pre-RI, site history was reviewed, and an analysis of materials used or produced at the facility was conducted to determine whether

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

potential
contaminant releases have occurred that could have ongoing impacts to the
Willamette River. Most site operations directly relating to manufacturing of
plywood at the LPA facility occurred within the four main coterminous buildings;
the Gas Dryer, S
team Dryer, Green Veneer and Pressing and Finishing Buildings. Raw logs
were typically stored along the waterfront pilings until processing began at the
dock, where over/in-water activities included cutting off the ends of the logs,
cutting to
rough length for peeling, and loading them onto a conveyor to the Green End .
Over water work in this area potentially produced wastes (including machinery
and transformer oils, metals, fuels, rubber, and organic debris from log
handling) which we
re not a focus of this investigation; these historic operations ceased in 1992
when LPA began to import veneer sheets via rail and truck. This potential
in-water source has been described to the EPA in previous direct and summary
communications. H
istorically (until the switch to imported veneers), the Green End operations
included peeling the logs using automated lathes. The waste material (bark) was
conveyed to wood waste storage areas via overhead ducts until used to fuel
boilers at the s
ite. Veneers were stored in the Green Veneer Building until ready for drying
in the Steam Dryer and Gas Dryer Buildings. Phenol-formaldehyde glues are
applied and the veneers are pressed in the Pressing and Finishing Room. The
mixing and stora
ge of glue was within a roofed containment area until piped into the Pressing
and Finishing Room for application. Although no specific sources were
identified, these areas were evaluated (see Risk Evaluation below) as potential
current/historical s
ources of contaminants to the Willamette River via groundwater transport.
Additionally, oils and greases (TPH) used throughout the facility, and metals
associated with the former machinery operations, are considered to be potential
sources to the W
illamette River through incidental transport via stormwater runoff. Other
potentially active sources of contamination identified include the Maintenance
Shop, Auto Repair Shop (and associated steam cleaning area/Outfall 5), Sander
Dust Ash Dispos
al Area, the storage tanks associated with the Boiler House, and pole-mounted
transformers. Potential sources of contamination to stormwater runoff included
TPH associated with incidental releases of oils, greases, and fuels, PCBs due to
releases f
rom site transformers, and heavy metals from general site operations and roof
runoff. The Maintenance and Auto Repair Shops were considered potential
sources of volatile organic compounds (VOCs), semi-volatile organic compounds
(SVOCs) and heavy
metals to stormwater runoff, groundwater, and riverbank soils. CRSG s use of
the southern portion of the LPA facility is not considered a source of
contaminants to the Willamette River. However, because of the lack of
historical information on t
he southern portion of the facility, a screening evaluation of groundwater for
SVOCs (and heavy metals at the northern part of this area where ash disposal
occurred) was deemed appropriate. Three underground storage tanks (USTs) used
to store gas
oline (4,000 to 10,000 gallon capacity) were decommissioned from a common
excavation east of the Boiler House. Approximately 80 cubic yards of
gasoline-impacted soil were removed with a maximum of 2.4 mg/kg of
gasoline-range total petroleum hydroca

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

rbons remaining in the excavation. A no further action determination was issued by the Northwest Region UST Cleanup Program on September 27, 1994. Although the USTs were not considered a potential source of contaminants to the Willamette River, the area where the USTs were previously located were evaluated (for fuels and SVOCs) due to the presence of storage tanks associated with the Boiler House. In fall 1997, an investigation of sediments in a 5.6 mile stretch of the Willamette River (known as the Portland Harbor) was conducted by the DEQ and US-EPA. Three shallow samples and one deeper sample were collected from sediments adjacent to the LPA and CRSG site. Polynuclear aromatic hydrocarbons (PAHs) and heavy metals were detected in the samples. In June 2000, LPA entered into a Voluntary Agreement for Department oversight of a Pre-Remedial Investigation (Pre-RI) to evaluate all potential current sources of contaminants to the Portland Harbor from upland sources. The objectives of the Pre-RI, as described in the June 2000 Voluntary Agreement, are to: 1: Identify and characterize all upland hazardous substance source areas at the facility; 2: Evaluate all contaminant migration pathways at the facility; 3: Determine the nature, extent, and distribution of hazardous substances in affected media at the facility; and 4: Identify all current and reasonably likely future human and ecological receptors at the facility. The Pre-RI was not designed to evaluate all potential sources of contaminants at the LPA facility, nor does it reach conclusion with respect to risks to human health or the environment associated with pathways other than those having connection to the Willamette River and/or riverbank sediments. With the completion of the investigation and the removals at the two small source areas (Outfall 5 soils and the knife grinding debris pile) the Pre-RI is considered to be complete. DEQ concludes that there are no longer any upland sources of contamination at the LPA site that threaten the river, and further investigation of currently active sources/pathways contributing contaminants to the Willamette River is not warranted. This conclusion is based upon an evaluation solely of sources and pathways which may have connection to the river, the current uses of the property (warehousing in building formerly used to produce plywood, and aggregate processing in southern portion of property), and presumes that continued action will be taken to control contaminant transport via the stormwater pathway by maintaining catch basin sediment controls. The Linnton Plywood Association (LPA) facility is a 26.5-acre site located at 10504 NW St. Helens Road in Portland. The northern 16 acres were used for manufacturing activities and the remaining portion has been sub-leased to Columbia River Sand and Gravel (CRSG) since 1994.

NARR ID: 5738423
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: DPETTIT
Updated Date: 2003-10-20 17:27:40
NARR ID: 5744373
NARR Code : General Site Description
Created By: GWISTAR
Create Date: 2003-11-20 16:35:43
Updated By: GWISTAR

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

Updated Date: 2003-11-20 16:35:43
NARR ID: 5744296
NARR Code : Project Issues Summary
Created By: DPETTIT
Create Date: 2003-10-20 17:41:40
Updated By: DPETTIT
Updated Date: 2003-10-20 17:41:40
NARR ID: 5738424
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738425
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5744295
NARR Code : Site History
Created By: DPETTIT
Create Date: 2003-10-20 17:38:10
Updated By: GWISTAR
Updated Date: 2003-11-20 16:34:08

ECWQ:

Owner Site Num: 133575
Site Name: Linnton Plywood Association
County Code : 26.00
Owner Name: Linnton Plywood Association
Owner Address: 10504 NW St. Helens Rd
Portland, 97231
Lat/Long 45.5989 / -122.7829
Owner Code: SUS

FACA Id : 4972

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 704864
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9419
Start Date: 2000-08-17 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2000-08-31 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705897
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported

Action ID: 9431
Start Date: 2000-01-28 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-01-28 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

Employee Id:	730		
Comments :	Decision to defer listing decision until July 31, 2000 pending new information that may support exclusion from listing on the CRL, or may affirm the Department's original proposal to list the site.		
Admin ID:	706125	Action ID:	9442
Agency ID :	Dept Of Environmental Quality	Start Date:	2000-02-24 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2002-01-09 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	593		
Comments :	Not reported		
Admin ID:	706140	Action ID:	9440
Agency ID :	Dept Of Environmental Quality	Start Date:	2000-02-29 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-06-07 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	541		
Comments :	Voluntary Agreement for RI and Scope of Work.		
Admin ID:	707103	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-06-14 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-06-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	313		
Comments :	Not reported		
Admin ID:	707104	Action ID:	9508
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-06-14 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-06-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		
Admin ID:	707455	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-10-12 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Not reported		
Admin ID:	707456	Action ID:	9502
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-01 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

Further Action:	High	Region ID:	Northwestern Region
Complete Date:	256	Substance Code:	SAS
Rank Value:	73	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-02-01 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Strategy Recommendation - High priority for an RI.		

Admin ID:	707472	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-10-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Recommendation based on 2/17/95 spill.		

Admin ID:	707726	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-11-12 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1999-11-17 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		

Admin ID:	702982	Action ID:	9511
Agency ID :	Dept Of Environmental Quality	Start Date:	2000-06-05 00:00:00
Further Action:	Medium	Region ID:	Northwestern Region
Complete Date:	258	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	True
Updated By:	DPETTIT	Update Date:	2003-10-20 17:42:45.
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	593		
Comments :	Not reported		

DISPOSAL:		Feature ID:	Not reported
Disposal ID:	Not reported		
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		

FEATURE:
Feature Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twtnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133575
Operation Status : Active
Common Name : Linnton Plywood Association
Yrs of Operation : 1971 - current
Comments : 1971 - current
Updated By : jmw
Updated Date : 1999-10-12 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196804
SIC Code: 2400
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 2373
Action: SI
Start Date: 06/05/20
End Date: 01-Oct-0
Program: VCS

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

LINNTON PLYWOOD ASSOCIATION (Continued)

1004580411

CRL: SUS
Facility Size: 26.5 acres
Project Manager Last Name: Pettit
Project Manager First Name: Don

6
WSW
1/2-1
2675 ft.

BABCOCK LAND COMPANY
9933 NW 107TH AVE
PORTLAND, OR 97231

SHWS - ECSI 1006853322
FINDS 110014154208

Relative:
Higher

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality

Actual:
47 ft.

ECSI:
State ID Number: 2361 Brown ID Not reported
Study Area: False Coordinator Supplier: jmw
Cercdis ID: Not reported Tax Lots: 27, 29, 100, 112
Size: approx. 1.9 acres NPL: False
Orphan: False Region ID: 2
Lat/Long: 45.5991 / -122.784 Tax Lots: 27, 29, 100, 112
Township Coord.: 1.00 Township Zone: N
Range Coord.: 1.00 Range Zone: W
Section Coord.: 2 Qtr Section: Not reported
Legislative : 2 Further Action: 258
FACA ID : 40782 Score Value: 66
Update Date : 2000-02-03 00:00:00 Created Date: jmw
Created Time : 1999-06-04 00:00:00

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: 1999-10-14 00:00:00
Update By: Not reported
Substance ID : 121662
Code : 7440-36-0
Substance Name : ANTIMONY
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319283
Sub Alias Name : SB
Substance Alias ID : 319284
Sub Alias Name : STIBIUM
Sampling Result ID : 340782
Feature Id : Not reported
Hazard Release Id : 382164
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-06-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

EDR ID Number
EPA ID Number
Database(s)

BABCOCK LAND COMPANY (Continued)

1006853322

Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-10-14 00:00:00
Sample Comment : 6 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-10-14 00:00:00
Update By: Not reported
Substance ID : 120942
Code : 117-84-0
Substance Name : DI-n-OCTYL PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316662
Sub Alias Name : BENZENEDICARBOXYLIC ACID,1,2-, DIOCTYL ESTER
Substance Alias ID : 316663
Sub Alias Name : BENZENEDICARBOXYLIC ACID,o-, DIOCTYL ESTER
Substance Alias ID : 316664
Sub Alias Name : DIOCTYL PHTHALATE,n-
Substance Alias ID : 316665
Sub Alias Name : DIOCTYL-o-BENZENEDICARBOXYLATE
Substance Alias ID : 316666
Sub Alias Name : DIOCTYL-o-PHTHALATE
Sampling Result ID : 340783
Feature Id : Not reported
Hazard Release Id : 382165
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-06-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-10-14 00:00:00
Sample Comment : 91 ppb
Alias Name: Harmer Steel Products Co.
Investigation Status: 208

NARR:

NARR ID: 5738363
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR Comments Weston sampling results from the Portland Harbor Sediment Study revealed antimony and dioctylphthalates in river sediments.
Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BABCOCK LAND COMPANY (Continued)

1006853322

for US EPA, 5/98.
Willamette River sediments.
(6/4/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Babcock Land Company property has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 8, 1999. Response from Babcock Land Company was received on April 16, 1999. A site screening is scheduled (level II priority). (10/8/99 TG/SAP) Strategy Recommendation for medium priority Preliminary Assessment. Slightly elevated antimony and di-n-octyl phthalate concentrations in adjacent sediments do not correlate with site activities. Site characterization and remedial activities conducted in 1990 - 1997 for Burlington Northern Railroad showed negligible contamination in a foundry sand pile. The pile was disposed of at an off-site landfill.

NARR ID: 5738364
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738365
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738366
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133562
Site Name: Babcock Land Company
County Code : 26.00
Owner Name: Babcock Land Company
Owner Address: 9933 NW 107th Ave
Portland, 97231
Lat/Long 45.5991 / -122.7847
Owner Code: SUS
Owner Site Num: 133563
Site Name: Babcock Land Company
County Code : 26.00
Owner Name: Harmer Steel Products Co
Owner Address: 9933 NW 107th Ave
Portland, 97231
Lat/Long 45.5991 / -122.7847
Owner Code: SUS

FACA Id : 40782

FACA Id : 40782

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 705945

Action ID: 9425

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BABCOCK LAND COMPANY (Continued)

1006853322

Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-11 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-02-01 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Not reported		

Admin ID:	705946	Action ID:	9496
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-11 00:00:00
Further Action:	Medium	Region ID:	Northwestern Region
Complete Date:	258	Substance Code:	SAS
Rank Value:	66	Cleanup Flag:	False
Updated By:	GWISTAR	Update Date:	2003-05-15 15:53:10.
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Strategy Recommendation - Medium Priority for a PA.		

Admin ID:	705947	Action ID:	9449
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-11 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-02-01 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Not reported		

Admin ID:	707067	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-06-04 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-06-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	313		
Comments :	Not reported		

Admin ID:	707068	Action ID:	9508
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-06-04 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-06-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

DISPOSAL:		Feature ID:	Not reported
Disposal ID:	Not reported		
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BABCOCK LAND COMPANY (Continued)

1006853322

Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twtnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133562
Operation Status : Inactive
Common Name : Babcock Land Company
Yrs of Operation : 1998 - Current
Comments : 1998 - Current
Updated By : jmw
Updated Date : 1999-11-02 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BABCOCK LAND COMPANY (Continued)

1006853322

Operations SIC Id:196791
SIC Code: 6531
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operation Id : 133563
Operation Status :Active
Common Name : Harmer Steel Products Co
Yrs of Operation : August 1974 - Current
Comments : August 1974 - Current
Updated By : jmw
Updated Date : 1999-06-04 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196792
SIC Code: 5090
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:196793
SIC Code: 3400
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

7
ENE
1/2-1
2679 ft.

10653 N LOMBARD
PORTLAND, OR 97203

SHWS - ECSI S103842679
OR HAZMAT N/A

Relative:
Higher

ECSI:

State ID Number: 1753
Study Area: False
Cercdis ID: Not reported
Size: 2.1 acres
Orphan: False
Lat/Long: 45.6056 / -122.763
Township Coord.: 1.00
Range Coord.: 1.00
Section Coord.: 1
Legislative : 1
FACA ID : 574
Update Date : 2004-01-14 16:54:03.
Created Time : 1995-09-27 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: Not reported
NPL: False
Region ID: 2
Tax Lots: Not reported
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 260
Score Value: 0
Created Date: dmc

Actual:
74 ft.

HAZ RELEASED:

Quant. Released: unk.
Date: unk.
Update Date: 1997-10-02 00:00:00
Update By: Not reported
Substance ID : 121996
Code : ECD228
Substance Name : PETROLEUM HYDROCARBONS
Substance Abbrev. : Not reported
Substance Categ ID : 8534
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

(Continued)

S103842679

Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 342639
Feature Id : Not reported
Hazard Release Id : 380772
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 1 - 3 feet
Start Date : 1996-11-21 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-10 00:00:00
Sample Comment : 8,200 ppm

Alias Name: Not reported
Investigation Status: 208

NARR:

NARR ID: 5735375
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments (9/27/95 GMW) About 1,000 gallons of petroleum-based black ink were released 9/30/91 when a truck from Puget Sound Truck Lines backed into an ink trailer in the paved parking area. Most of the ink entered a sump/drywell. Cleanup activities revealed significant soil contamination around the clogged and interconnected storm drain/drywell system, and pre-existing contamination from blue ink. During cleanup in 10/91, rain caused sumps to overflow and residual inks migrated to the Columbia Slough.

A major fire in 12/93 caused significant releases of inks and contaminated water from firefighting, and gutted the building. Contaminants entered soil beneath the building floor, dry wells that had been rebuilt after the 1991-92 cleanup, and a low-lying area adjacent to railroad tracks at the north side of the site. Petroleum hydrocarbons were the primary contaminant. (2/10/97 GMW) Flint's consultant has prepared a report documenting the results of limited surface and subsurface soil sampling in areas expected to have the highest levels of contamination. This report shows that moderate levels of heavy hydrocarbons and low levels of copper, chromium, and zinc remain in shallow soils in some areas.

Petroleum-based inks; copper, chromium, lead, and zinc contained in colored inks; VOCs including acetone, BTEX, DCE, PCE, and TCA.

Past practices; 1,000-gal. spill of ink 9/30/91; major fire 12/19/93 that gutted building and caused release of inks and contaminated fire-fighting water.

Soil, surface water.

The most likely environmental receptor appears to be surface water and the Columbia Slough, located about 0.75 mile northeast of the site. Excavations to a depth of 30 feet did not encounter groundwater.

(4/25/96 GMW) Following the 1991 spill that contaminated a drywell and led to

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

(Continued)

S103842679

the discovery of a clogged and highly contaminated underground drainage system, nearly 1,300 tons of ink, soil, and debris and 55,000 gallons of contaminated wastewater were disposed of off-site. DEQ's NWR signed off on the cleanup in 8/92, and the underground drainage/drywell system was rebuilt. After the 1993 fire, Flint Ink's contractor vacuumed up ink-contaminated firefighting water from sumps and drywells, as well as from a railroad ditch along the north side of the property. Soil removal also occurred in the north (main) drywell, where discoloration from ink was noted. Contamination in other drywells was observed, but not remediated. Within the building, the contractor removed remaining inks and tank "carcasses," steam-cleaned floors and walls, and sampled soils beneath the damaged concrete floor. Documentation of work done at the site is inconsistent, as has been the sampling strategy. (11/10/97 LS

K) Site reevaluated as part of review of all sites within the Columbia Slough Study Area. The site is located about 0.75 miles southwest of the Lower Slough. Smith Lake is immediately north of this portion of the Slough.

NARR ID: 5735376
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735377
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735378
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735379
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735380
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133083
Site Name: Flint Ink Corp.
County Code : 26.00
Owner Name: Flint Ink
Owner Address: 10653 N Lombard ST
Portland, 97203
Lat/Long 45.6056 / -122.7637
Owner Code: SUS

FACA Id : 574

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S103842679

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 712610
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments: Not reported

Action ID: 9437
Start Date: 1996-04-25 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-05-02 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712611
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 767
Comments: Not reported

Action ID: 9449
Start Date: 1996-05-02 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-12-15 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712612
Agency ID: Dept Of Environmental Quality
Further Action: Low
Complete Date: 260
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments: Not reported

Action ID: 9502
Start Date: 1996-05-02 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-09-08 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 713918
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 767
Comments: Not reported

Action ID: 9424
Start Date: 1995-09-27 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-09-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 713926
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments: Federal screening.

Action ID: 9425
Start Date: 1995-09-27 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-05-02 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported

Feature ID: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

(Continued)

S103842679

Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		

FEATURE:

Feature Id :	Not reported
Site Id :	Not reported
Feature Code :	Not reported
Relative Position :	Not reported
Hazard Rel Id :	Not reported
Region Code :	Not reported
Lat Long Method :	Not reported
Lat Long Source :	Not reported
County Code :	Not reported
Reference Id :	Not reported
Twnshp Coord :	Not reported
Township Zone :	Not reported
Range Coord :	Not reported
Range Zone :	Not reported
Section Coord :	Not reported
Qtr Section Coord :	Not reported
Address :	Not reported
Zip Plus :	Not reported
Lat/Long :	Not reported
Lat/Lon Decimal :	Not reported
Feature Size :	Not reported
Est Accuracy :	Not reported
Created On Date :	Not reported
Created By Prgm :	Not reported
Last Updated By :	Not reported
Last Updated On :	Not reported
Comment :	Not reported

WELL:

Well ID:	Not reported
Water Resource Code:	Not reported
Effective Date:	Not reported
Aquifer Code:	Not reported
Ground Station Key:	Not reported

OPERATIONS:

Operation Id :	133083
Operation Status :	Active
Common Name :	Flint Ink
Yrs of Operation :	1971 to present
Comments :	1971 to present

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

(Continued)

S103842679

Updated By : jmw
Updated Date : 2001-06-04 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196046
SIC Code: 2893
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

HAZMAT:

Facility ID: 0291-910444
Incident District: PORTLAND
Incident Day: Mon
Alarm Time: 12/30/99
Back in Service: 12/30/99
Responsible Party: SPENCER ENVIRONMENTAL

Dept Resp: PORTLAND FIRE BUREAU
Arrival Time: 12/30/99
Company: SPENCER ENVIRONMENTAL

15770 BEAVERGLEN DR
OREGON CITY, OR 97045

RP Phone: 6550896
Scene Type: Not reported
Wind Direction: E
WFair: True
Num U Desc: Not reported
Num U Local: 0
Num U Police: 0
Num U Amb: 0
Num U Federal: 0
Num U Other: 0

RP Phone 2: Not reported
Area Type: Not reported
Wind Speed: 10-15

Act Secure Area: True
Act Hot Zone: True
Act on Site: False
Sol Com Vehicle: False
Chemical: NATURAL GAS

Num U Fire: 4
Num U State: 0
Num U Public Wks: 0
Num U Agency: 0
Num U RR: 0
Act Crowd Control: False

Num Cont 1: 1
Num Cont 2: 0
Num Cont 3: 0
Num Cont 4: Not reported
Num Cont 5: Not reported

Act Transport: False
Mi Fuel: True

Amt Rsk G1: 0
Amt Rsk G2: 0
Amt Rsk G3: 0
Amt Rsk G4: 0
Amt Rsk G5: 0

Size Cont 1: 1
Size Cont 2: 0
Size Cont 3: 0
Size Cont 4: Not reported
Size Cont 5: Not reported
Amt Rel G1: 0
Amt Rel G2: 0
Amt Rel G3: 0
Amt Rel G4: 0

Mu Chem Trec: False
Mu Placards: False
Mu Other Desc: Not reported

Mu Ship Papers: False
Mu On Scene Test: False

Vehicle Plus: 100
Fire Inj: 0
Fire Decon: 0
Fire Hospital: 0
Civ Inj: 0
Civ Decon: 0
Civ Hospital: 0
Other Inj: 0
Other Decon: 0

Fixed Property: 800
Fire Death: 0
Fire Treat: 0
Civ Death: 0
Civ Treat: 0
Other Death: 0
Other Treat: 0

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

(Continued)

S103842679

Other Hopital:	0	Title Person File:	LT
Person File:	R HAMMOND	Agency ID:	Not reported
Agency:	Not reported	Inc Num Short:	910444
Num U Deq:	0	Hazmat local:	F
Hazmat Team:	Not reported	Agency Phone:	Not reported
Hazmat State:	F	OERS Number:	Not reported
ID Number:	02-291		
Dept Rsp 2:	Not reported	St Pub Struct:	False
St Pub Road:	False	St Forest:	False
St Pub Land:	False		
St Other:	False	St Pri Struct:	False
St Pri Road:	True	St Pri Land:	False
St Waterway:	False	A Residential:	False
A Industrial:	True	A commercial:	False
A Forest:	False		
A Rural Agri:	False	W Fog:	False
W Rain:	False		
W Snow Ice:	False	W Other Desc:	Not reported
W Sunny:	False	Act Traffic:	False
Act Activate Oers:	False	Act ID Hazmat:	True
Act Exiting:	False	Act Decontam:	False
Act Evcuate:	True	Act Cleanup:	False
Act Evaluate:	False	Act Remote Haz:	True
Act Pub Info:	False	Soi Car:	False
Soi Drug Lab:	False	Soi Train:	False
Soi Fixed Facility:	False	Soi Ship:	False
Soi Pipeline:	True	Soi Other:	F
Soi Aircraft:	False	Soi Other Desc:	Not reported
Soi Desc:	F	Mi Product:	False
Mi Cargo:	False		
Mi Waste Mat:	False	Coi Dur Fire:	False
Coi Normal Op:	False	Coi Excavation:	True
Coi Dur Storage:	False	Coi MVA:	False
Coi Railcar:	False	Coi Unauthor:	False
Coi Durmanuf:	False	Coi Dur Repair:	False
Coi Derailment:	False	Coi in Transit:	False
Coi Abandon:	False	Coi Mat not Rel:	False
Coi Docked:	False	Amt Ricf1:	0
Amt Rilb1:	0	Amt Ricf2:	0
Amt Rilb2:	0	Amt Ricf3:	0
Amt Rilb3:	0	Amt Ricf4:	0
Amt Rilb4:	0	Amt Ricf5:	0
Amt Rilb5:	0	Num U State Ag:	0
A Other:	F	Amt Rsk C1:	0
Amt Rsk P1:	0	Amt Rsk C2:	0
Amt Rsk P2:	0	Amt Rsk C3:	0
Amt Rsk P3:	0	Amt Rsk C4:	0
Amt Rsk P4:	0	Amt Rsk C5:	0
Amt Rsk P5:	0	Mu Off Scene:	False
Mu Sfm Hazcom:	False	Mu Other:	False
Mu Text Book:	F		
Mu Resp Party:	T	Hmb Cause Fire:	False
FD Id:	0291		
Incident Date:	11/11/91		
Agency Report # :	91-44582		
Hmb Cont Fire:	False		
In Route :	12/30/99		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S103842679

Date Added: Not reported
ID Number: 10653
Prefix: N
Suffix: ST
Street: LOMBARD
Street Type: Not reported
Unit: Not reported

Hmb Caus Explo: False

Hmb Cont Explo: False

Hmb Inert No React: False

Hmb Bec Airborne: True

Hmb Contam Area: False

Hmb Enterd Water: False

Comments :

BACKHOE PULLED A 1 NATURAL GAS SUPPLY LINE WHILE EXCAVATING A DITCH
DOWN CENTER OF DRIVE AREA BETWEEN 2 100 X 500 TILT-UP CONCRETE BLDGS.
NATURAL GAS PERMEATED VENTED GROUND W/IN A 50 X50 AREA. NW NATURAL
GAS CO. CONFIRMED GAS WAS SHUT OFF BEFORE EV

C8
East
1/2-1
2732 ft.
PORT OF PORTLAND - TERMINAL 4 AUTO STORA
10400 N LOMBARD ST
PORTLAND, OR 97203

LUST S103543104
OR CRL N/A

Site 1 of 2 in cluster C

Relative:
Higher

LUST:

Facility ID: 26-87-0003
Region: North Western Region
Clean Lead: Responsible Person
Cleanup Start: 12MAR1987
Closed Date: 11JUN1988
Cleanup Complete: 01AUG1987

Actual:
89 ft.

OR CRL:

Facility ID: 172
Location ID: 491
Status Code: LIS
Facility Status: SITE INVESTIGATION
Lat/Long: 45.5994 / -122.7716

C9
East
1/2-1
2732 ft.
PORT OF PORTLAND - TERMINAL 4 AUTO STORA
10400 N LOMBARD ST
PORTLAND, OR 97203

SHWS - ECSI S106236336
N/A

Site 2 of 2 in cluster C

Relative:
Higher

ECSI:

State ID Number: 172
Study Area: False
Cerclis ID: Not reported
Size: 112 acres
Orphan: False
Lat/Long: 45.5994 / -122.771
Township Coord.: 1.00
Range Coord.: 1.00
Section Coord.: 2
Legislative : 2
FACA ID : 491
Update Date : 2002-11-20 00:00:00
Created Time : 1988-08-15 00:00:00

Actual:
89 ft.

Brown ID Not reported
Coordinator Supplier: jmw
Tax Lots: 114,113
NPL: False
Region ID: 2
Tax Lots: 114,113
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: Not reported
Score Value: 0
Created Date: CONV

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

HAZ RELEASED:

Quant. Released: Approximately 5,000 gal. released from a 20,000-gal. tank, 1984

Date: Not reported

Update Date: 1995-05-06 00:00:00

Update By: Not reported

Substance ID : 121994

Code : ECD222

Substance Name : PETROLEUM

Substance Abbrev. : Not reported

Substance Categ ID : 8533

Substance Sub Categ : Petroleum Related Releases for OSPIRG Report

Category Level : Not reported

Created By : Not reported

Create Date : 2002-12-17 08:50:34.

Substance Alias ID : Not reported

Sub Alias Name : Not reported

Sampling Result ID : 346034

Feature Id : Not reported

Hazard Release Id : 382894

Medium Code Id : 703

Substance Id : Not reported

Unit Code : Not reported

Observation : False

Owner Operator : False

Lab Data : True

Sample Depth : Not reported

Start Date : 1990-01-17 00:00:00

End Date : Not reported

Minimum Concentration : Not reported

Max Concentration : Not reported

Last Update By : gmw

Last Updated On : 1995-06-05 00:00:00

Sample Comment : 32,760 ppm (TPH)

Quant. Released: unknown

Date: unknown

Update Date: 1992-06-05 00:00:00

Update By: Not reported

Substance ID : 122014

Code : ECD281

Substance Name : VOLATILE ORGANIC COMPOUNDS (VOC)

Substance Abbrev. : Not reported

Substance Categ ID : Not reported

Substance Sub Categ : Not reported

Category Level : Not reported

Created By : Not reported

Create Date : Not reported

Substance Alias ID : Not reported

Sub Alias Name : Not reported

Sampling Result ID : 345532

Feature Id : Not reported

Hazard Release Id : 383232

Medium Code Id : 703

Substance Id : Not reported

Unit Code : Not reported

Observation : False

Owner Operator : False

Lab Data : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

Sample Depth : 35 feet
Start Date : 1990-01-17 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1995-06-05 00:00:00
Sample Comment : 8 - 219 ppb

Alias Name: St. John's Junkyard
Toyota Motor Sales
Vehicle Processors Inc.

Investigation Status: 207

NARR:

NARR ID: 5729863
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments During a tank integrity test in 1985 it was discovered that a fill pipe leaked on the vanfuel (kerosene) tank. During the excavation to repair the tank, it became apparent that soil was contaminated. (5/6/92 AGG) Bioremediation project forced contamination deeper into subsurface. In 1992, a gasoline tank was discovered to be leaking.

Vanfuel (similar to kerosene); low concentrations of VOCs (methylene chloride, carbon tetrachloride, TCA, toluene, ethylbenzene, and xylene)

Site is at Port of Portland Terminal 4 on the Willamette River.

Leaking tank; time of release 1984 & 1985.

(3/14/01 GMW) Site referred to the NWR Underground Tank Program (see LUST files 26-87-0003, 26-91-0133, 26-94-0140, and 26-95-0263. (11/20/01 TBG/VCP) Port submits a Preliminary Assessment dated August 21, 2000, and conducts a Site Investigation on

the lower lot in April 2001. Subsurface petroleum contamination observed, but no source identified. DEQ recommends further evaluation to determine if soil and groundwater levels exceed ecological screening concentrations. Evaluation of upper lot continues

under NWR UST Program. (10/30/02 TBG/VCP) Data from four riverbank groundwater monitoring wells under review.

Soil contamination, potential threat to groundwater.

NARR ID: 5729864
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR ID: 5729865
NARR Code : Site Location
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR ID: 5729866
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729867
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729868
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 131581 FACA Id : 491
Site Name: Port of Portland - Terminal 4 Auto Storage
County Code : 26.00
Owner Name: Toyota Motor Sales
Owner Address: 10400 N Lombard ST
Portland, 97203
Lat/Long 45.5994 / -122.7716
Owner Code: LIS

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 721243 Action ID: 9459
Agency ID : Dept Of Environmental Quality Start Date: 1992-05-05 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: Not reported
Comments : Not reported

Admin ID: 722387 Action ID: 9465
Agency ID : Dept Of Environmental Quality Start Date: 1992-10-05 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 2319
Comments : Not reported

Admin ID: 722394 Action ID: 9499
Agency ID : Dept Of Environmental Quality Start Date: 1992-05-07 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

Comments : Not reported

Admin ID:	722395	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-10-05 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Green card signed for 10/9/92; 45 days after 11/23/92, 90 days after 1/7/93.		

Admin ID:	722456	Action ID:	9515
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-03-24 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	718214	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1988-08-15 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1995-03-17 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	26		
Comments :	Not reported		

Admin ID:	722962	Action ID:	9438
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-28 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1998-03-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	649		
Comments :	Not reported		

Admin ID:	722963	Action ID:	9439
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-28 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1998-03-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	649		
Comments :	Not reported		

Admin ID:	702685	Action ID:	9456
Agency ID :	Dept Of Environmental Quality	Start Date:	2000-08-21 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

Updated By:	jmw	Update Date:	2001-11-27 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Not reported		

Admin ID:	702686	Action ID:	9511
Agency ID :	Dept Of Environmental Quality	Start Date:	2001-04-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2001-11-27 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	2157		
Comments :	Not reported		

Admin ID:	719158	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-03-21 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	719159	Action ID:	9437
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-03-22 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	719160	Action ID:	9449
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-03-23 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	723675	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-05-07 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	724050	Action ID:	9445
Agency ID :	Dept Of Environmental Quality	Start Date:	1988-11-30 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	708920	Action ID:	9477
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-12-14 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	gmw	Update Date:	1999-04-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	649		
Comments :	LUST log #26-91-0133		

Admin ID:	719738	Action ID:	9448
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-25 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	ars	Update Date:	1995-01-05 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	719739	Action ID:	9488
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-27 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	ars	Update Date:	1995-01-05 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	719740	Action ID:	9489
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-27 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	ars	Update Date:	1995-01-05 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

DISPOSAL:		Feature ID:	Not reported
Disposal ID:	Not reported		
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twtnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 131581
Operation Status :Active
Common Name : Toyota Motor Sales
Yrs of Operation : Not reported
Comments : Not reported
Updated By : CONV
Updated Date : 1994-09-13 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:195478

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PORT OF PORTLAND - TERMINAL 4 AUTO STORA (Continued)

S106236336

SIC Code: 4449
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

D10
NE
1/2-1
2830 ft.

KLIX CORP.
10771 N LOMBARD ST
PORTLAND, OR 97203

SHWS - ECSI
LUST
OR CRL
OR VCS
AUL

S100497102
N/A

Site 1 of 2 in cluster D

Relative:
Higher

Actual:
74 ft.

ECSI:

State ID Number: 1075
Study Area: False
Cercles ID: 059418392
Size: 0.88 acre
Orphan: False
Lat/Long: 45.6066 / -122.766
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 35
Legislative : 35
FACA ID : 630
Update Date : 1994-12-30 00:00:00
Created Time : 1991-01-17 00:00:00

Brown ID
Coordinator Supplier: dmc
Tax Lots: Not reported
NPL: False
Region ID: 2
Tax Lots: Not reported
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: Not reported
Score Value: 0
Created Date: CONV

HAZ RELEASED:

Quant. Released: unknown
Date: unknown
Update Date: 1996-01-26 00:00:00
Update By: Not reported
Substance ID : 121586
Code : 67-63-0
Substance Name : ISOPROPANOL
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319110
Sub Alias Name : DIMETHYL CARBINOL
Substance Alias ID : 319111
Sub Alias Name : ISOPROPYL ALCOHOL
Substance Alias ID : 319112
Sub Alias Name : PROPANOL,2-
Substance Alias ID : 319113
Sub Alias Name : PROPYL ALCOHOL,sec-
Sampling Result ID : 344027
Feature Id : Not reported
Hazard Release Id : 380335
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1991-10-01 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

KLIX CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S100497102

Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmd
Last Updated On : 1996-01-26 00:00:00
Sample Comment : 720 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1996-01-26 00:00:00
Update By: Not reported
Substance ID : 121615
Code : 72-55-9
Substance Name : DDE,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319200
Sub Alias Name : BIS(p-CHLOROPHENYL)-1,1-DICHLOROETHYLENE,2,2-
Substance Alias ID : 319201
Sub Alias Name : DICHLORODIPHENYL DICHLOROETHYLENE,p,p'-
Substance Alias ID : 319202
Sub Alias Name : DICHLOROETHENYLIDENE)BIS(4-CHLOROBENZENE),1,1'-(-
Sampling Result ID : 344028
Feature Id : Not reported
Hazard Release Id : 380336
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1995-05-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmd
Last Updated On : 1996-01-26 00:00:00
Sample Comment : 35 ppm
Quant. Released: unknown
Date: unknown
Update Date: 1992-07-22 00:00:00
Update By: Not reported
Substance ID : 121587
Code : 67-64-1
Substance Name : ACETONE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319114
Sub Alias Name : DIMETHYL KETONE
Substance Alias ID : 319115

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

KLIX CORP. (Continued)

S100497102

Sub Alias Name : KETOPROPANE,beta-
Substance Alias ID : 319116
Sub Alias Name : PROPANONE,2-
Substance Alias ID : 319117
Sub Alias Name : PYROACETIC ETHER
Sampling Result ID : 345661
Feature Id : Not reported
Hazard Release Id : 383356
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1991-10-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmd
Last Updated On : 1996-01-26 00:00:00
Sample Comment : 14 ppm

Alias Name: Not reported

Investigation Status: 207

NARR:

NARR ID: 5731319
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments Site soils have been found to contain a number of volatile and semivolatile organic compounds including isopropyl alcohol (IPA), various VOCs used in janitorial cleaning products, polynuclear aromatic hydrocarbons, and organochlorine pesticides including DDD and DDT. Most IPA contamination was associated with an underground storage tank that has since been removed (along with contaminated soil). Work completed by HartCrowser in Summer 1995 showed some VOC and pesticide contamination of soils in the eastern part of the site yard, to approximately 12 feet below ground surface.
1) NWR NFA ltr from Rai Peterson (9/13/93). 2) Initial Site Characterization Report by TMC Environmental (8/10/91). 3) RP Correspondence. 4) Final Site Characterization Report (10/24/95) by Hart Crowser.
Various volatile and semi-volatile organic compounds used in the manufacture of janitorial cleaning supplies; pesticides including DDD and DDT.
After review of all site data completed in March 1995, DEQ determined that most site cleanup had been adequate, but that limited additional sampling was needed in the eastern part of the site yard. Work was completed in May 1995, and surface and sub surface soil was found to contain modest concentrations of volatile and semivolatile organic compounds (DDD was detected at 35 ppm at 10 to 12 feet below ground surface). Additional sampling completed in August 1995 further delineated soil contamination in the yard. VCP staff recommended on 12/8/95 that no further action be performed at the site. A notice will be attached to the site deed indicating

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

KLIX CORP. (Continued)

S100497102

that the site NFA was given under DEQ's less stringent industrial cleanup standard and is predicted on use of the site remaining industrial or other low-exposure uses. KLIX was formerly involved in the manufacturing of a variety of janitorial cleaning supplies. They are alleged to have been briefly involved in the formulation and repackaging of products containing pesticides and herbicides. It appears that waste liquids were dumped into a sanitary sewer line for a number of years at the site. Drums (including some that were leaking) were commonly stored in unprotected areas in the Klix storage yard. The times of releases are not known, but are expected to have occurred over a number of years of operation. Most releases appear to have been via floor grates in the site building to a steel sanitary sewer line, which intersected a sampling manhole on-site before feeding into a local Portland sanitary sewer main.

The site is currently vacant, and access to the site restricted. Contaminated soils are covered by asphalt. Therefore the potential for contact with contaminated site soils is minimal. Depth to groundwater at the site is 50 feet. Contamination has been found to 12 feet below ground surface. A release to groundwater is unlikely. There is no use of groundwater for drinking purposes in the immediate vicinity of the site.

Responsible Party-Initiated Letter Agreement

A 2,000-gallon gasoline UST was removed from the southeast part of the site yard on 10/5/89. After sampling of suspect soils beneath the tank, DEQ determined on 1/16/90 that no further action was required regarding the tank. During a 1990 site visit

, DEQ and Portland Bureau of Environmental Services viewed drummed hazardous waste improperly stored on-site, and evidence of illegal disposal of other liquid wastes. All of the wastes were later removed from the site. A 4,000-gallon isopropyl alcohol tank was removed from the site in February 1991. Subsequent sampling identified a number of VOCs below and in the vicinity of the tank. A total of 360 cu. yds. of soil were removed from near the tank. An on-site sewer line was investigated in late 1991. On 9/13/93 DEQ determined that no further action was needed for the site sewer line. The owner of the site entered into a letter agreement with VCS in 1994. Two phases of investigation were completed in the site yard under VCP staff who determined that contaminant concentrations in soil are below DEQ industrial soil cleanup standards. DEQ staff determined on 6/11/96 that no further action was required for the site under an industrial cleanup scenario. The NFA is contingent upon use of the site remaining industrial.

VOCs, SVOCs, pesticides

NARR ID: 5731320
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731321
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

KLIX CORP. (Continued)

S100497102

Updated Date: 2002-12-17 08:50:04
NARR ID: 5731322
NARR Code : Project Issues Summary
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731323
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731324
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731325
NARR Code : Project Type
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731326
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731327
NARR Code : Substances of Concern
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 132386
Site Name: KLIX Corp.
County Code : 26.00
Owner Name: KLIX Chemical
Owner Address: 10771 N Lombard ST
Portland, 97203
Lat/Long 45.6066 / -122.7661
Owner Code: LIS

FACA Id : 630

SITE CONTROL:

Site Control Sequence # : 170
Site Id : 1075
Control Sequence Number : 5
Begin Date : 1996-06-01 00:00:00
End Date : Not reported
Frequency Of Review : 0
Last Reviewed By : Dan Hafley
Last Reviewed Date : Not reported
Last Updated By : GWISTAR

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

KLIX CORP. (Continued)

S100497102

Last Updated Date : 2003-07-17 14:37:06

Site Comments : DEQ's NFA determination is contingent on use of the site remaining industrial or similar uses.

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 704512 Action ID: 9411
Agency ID : Dept Of Environmental Quality Start Date: 1996-06-01 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 2000-06-21 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.

Employee Id: 382
Comments : DEQ's NFA determination is contingent on use of the site remaining industrial or similar uses.

Admin ID: 714898 Action ID: 9511
Agency ID : Dept Of Environmental Quality Start Date: 1995-05-13 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: dmc Update Date: 1997-04-04 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 382
Comments : Not reported

Admin ID: 715286 Action ID: 9426
Agency ID : Dept Of Environmental Quality Start Date: 1994-10-12 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: dmc Update Date: 1997-10-09 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 631
Comments : Begins DEQ evaluation of site data as part of Letter Agreement with site owner Cameron Draine.

Admin ID: 720186 Action ID: 9498
Agency ID : Dept Of Environmental Quality Start Date: 1991-01-17 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 224
Comments : Not reported

Admin ID: 720268 Action ID: 9428
Agency ID : Dept Of Environmental Quality Start Date: 1991-08-09 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

KLIX CORP. (Continued)

S100497102

Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: Not reported
Comments : Extension requested by Portland Port Industrial Park.

Admin ID: 720300 Action ID: 9468
Agency ID : Environmantal Protection Agency Start Date: 1984-10-29 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: Not reported
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: Not reported
Comments : State lead

Admin ID: 716254 Action ID: 9424
Agency ID : Dept Of Environmental Quality Start Date: 1991-01-17 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1995-03-17 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 224
Comments : Not reported

Admin ID: 721750 Action ID: 9519
Agency ID : Dept Of Environmental Quality Start Date: 1994-08-02 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: dmc Update Date: 1995-02-03 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 711
Comments : Not reported

Admin ID: 706808 Action ID: 9434
Agency ID : Dept Of Environmental Quality Start Date: 1993-09-13 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: jmw Update Date: 1999-03-26 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 382
Comments : Not reported

Admin ID: 702191 Action ID: 9438
Agency ID : Dept Of Environmental Quality Start Date: 2001-08-30 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: kvp Update Date: 2001-09-04 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 730
Comments : Conditional NFA requires site to be listed on the CRL & Inventory.

Admin ID: 702192 Action ID: 9439
Agency ID : Dept Of Environmental Quality Start Date: 2001-08-30 00:00:00
Further Action: Not reported Region ID: Northwestern Region

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

KLIX CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S100497102

Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Conditional NFA requires site to be listed on the CRL & Inventory.

Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-09-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 717625
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 382
Comments : Not reported

Action ID: 9442
Start Date: 1994-09-28 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-04-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 723112
Agency ID : Environmantal Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9444
Start Date: 1984-12-10 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 723480
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: 224
Comments : Not reported

Action ID: 9430
Start Date: 1991-08-10 00:00:00
Region ID: Not reported
Substance Code: SAS
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 723565
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: Not reported
Comments : Rai Peterson/NWR; for soil contamination associated with a leaking sewer line.

Action ID: 9443
Start Date: 1993-09-13 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-11-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 723695
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: 224
Comments : Not reported

Action ID: 9425
Start Date: 1991-01-17 00:00:00
Region ID: Not reported
Substance Code: SAS
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

KLIX CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S100497102

Admin ID:	723944	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-06-24 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	224		
Comments :	Not reported		
Admin ID:	724257	Action ID:	9451
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-08-09 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Comments submitted by Portland Port Industrial Park.		
Admin ID:	704250	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	2001-05-31 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	2001-09-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		
Admin ID:	704251	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	2001-05-31 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	2001-09-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		
Admin ID:	713699	Action ID:	9421
Agency ID :	Environmental Protection Agency	Start Date:	1983-01-01 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-09-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		
Admin ID:	724845	Action ID:	9431
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-07-23 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KLIX CORP. (Continued)

S100497102

Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: Not reported
Comments : Until cleanup is complete.

Admin ID: 724919 Action ID: 9437
Agency ID : Dept Of Environmental Quality Start Date: 1991-01-17 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 224
Comments : Not reported

DISPOSAL:

Disposal ID: Not reported Feature ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported End Date: Not reported
Disposal Flag: Not reported Disposal Qty: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

KLIX CORP. (Continued)

S100497102

Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 132386
Operation Status : Inactive
Common Name : KLIX Chemical
Yrs of Operation : 1968 to 1992
Comments : 1968 to 1992
Updated By : dxh
Updated Date : 1995-09-29 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 194841
SIC Code: 2841
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

LUST:

Facility ID: 26-89-0220
Region: North Western Region
Clean Lead: Not reported
Cleanup Start: 27AUG1989
Closed Date: 16JAN1990
Cleanup Complete: 16JAN1990

Facility ID: 26-91-0030
Region: North Western Region
Clean Lead: Not reported
Cleanup Start: 17JAN1991
Closed Date: 13SEP1993
Cleanup Complete: 13SEP1993

OR INSTUTIONAL CONTROL:

Facility ID : 1075
Facility Status : No Further Action (Conditional)
Status Code: LIS
Geo Location ID: 8876
Lat/Long: 45.6066 / -122.7661

OR CRL:

Facility ID: 1075
Location ID: 8876
Status Code: LIS
Facility Status: No Further Action (Conditional)
Lat/Long: 45.6066 / -122.7661

OR VCS:

ECS Site ID: 1075

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

KLIX CORP. (Continued)

S100497102

Action: CNFA
Start Date: 06/01/19
End Date: 01-Jun-9
Program: VCS
CRL: LIS
Facility Size: 0.88 acre
Project Manager Last Name: Hafley
Project Manager First Name: Daniel

D11
NE
1/2-1
2873 ft.

CHEMCENTRAL PORTLAND
10821 N LOMBARD
PORTLAND, OR 97203

Site 2 of 2 in cluster D

Relative:
Higher

Actual:
69 ft.

RCRIS-SQG 1000296959
SHWS - ECSI ORD000711671
FINDS
HSIS
LUST
OR SPILLS
OR CRL
UST
AST
CERC-NFRAP
OR VCS

CERCLIS-NFRAP Classification Data:

Site Incident Category: Not reported
Non NPL Code: NFRAP
Ownership Status: Other

Federal Facility: Not a Federal Facility

NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment: DISCOVERY
Assessment: PRELIMINARY ASSESSMENT
Assessment: SITE INSPECTION
Assessment: ARCHIVE SITE

Completed: 04/17/1981
Completed: 12/10/1984
Completed: 12/10/1984
Completed: 02/17/1993

RCRIS:

Owner: CHEMCENTRAL/
(708) 594-7000
EPA ID: ORD000711671
Contact: DAVID HOFF
(503) 286-5821

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
National Compliance Data Base
National Emissions Inventory
Oregon Department of Environmental Quality
Resource Conservation and Recovery Act Information system
Toxics Release Inventory

ECSI:

State ID Number: 878
Study Area: False
Cercdis ID: 000711671
Size: Not reported
Orphan: False
Lat/Long: 45.6069 / -122.766
Township Coord.: 2.00
Range Coord.: 1.00

Brown ID: Not reported
Coordinator Supplier: kpd
Tax Lots: Not reported
NPL: False
Region ID: 2
Tax Lots: Not reported
Township Zone: N
Range Zone: W

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Section Coord.:	35	Qtr Section:	Not reported
Legislative :	35	Further Action:	256
FACA ID :	1271	Score Value:	0
Update Date :	1998-05-14 00:00:00	Created Date:	CONV
Created Time :	1989-04-28 00:00:00		

HAZ RELEASED:

Quant. Released: unknown
Date: unknown
Update Date: 1996-11-09 00:00:00
Update By: Not reported
Substance ID : 121700
Code : 75-34-3
Substance Name : DICHLOROETHANE,1,1-
Substance Abbrev. : Not reported
Substance Categ ID : 8548
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319361
Sub Alias Name : ETHANE,1,1-DICHLORO-
Substance Alias ID : 319362
Sub Alias Name : ETHYLIDENE CHLORIDE
Substance Alias ID : 319363
Sub Alias Name : ETHYLIDENE DICHLORIDE
Sampling Result ID : 342305
Feature Id : Not reported
Hazard Release Id : 380556
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-08-07 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 90 ppb
Quant. Released: unknown
Date: unknown
Update Date: 1996-11-09 00:00:00
Update By: Not reported
Substance ID : 121124
Code : 156-59-2
Substance Name : DICHLOROETHYLENE,1,2-CIS-
Substance Abbrev. : Not reported
Substance Categ ID : 8513
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317200
Sub Alias Name : ACETYLENE DICHLORIDE,CIS-

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Substance Alias ID : 317201
Sub Alias Name : DICHLOROETHENE,CIS-
Substance Alias ID : 317202
Sub Alias Name : DICHLOROETHYLENE,CIS-
Substance Alias ID : 317203
Sub Alias Name : DICHLOROETHENE,1,2-CIS-
Sampling Result ID : 342306
Feature Id : Not reported
Hazard Release Id : 380573
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-08-07 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 800 ppb
Quant. Released: unknown
Date: unknown
Update Date: 1996-11-09 00:00:00
Update By: Not reported
Substance ID : 121610
Code : 71-55-6
Substance Name : TRICHLOROETHANE,1,1,1-
Substance Abbrev. : Not reported
Substance Categ ID : 8521
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8552
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318151
Sub Alias Name : TCA,1,1,1-
Substance Alias ID : 319183
Sub Alias Name : BALTANA
Substance Alias ID : 319184
Sub Alias Name : CHLOROTHENE
Substance Alias ID : 319185
Sub Alias Name : METHYLCHLOROFORM
Sampling Result ID : 342308
Feature Id : Not reported
Hazard Release Id : 380574
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Lab Data : True
Sample Depth : Not reported
Start Date : 1993-08-27 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 1,200 ppm
Sampling Result ID : 342309
Feature Id : Not reported
Hazard Release Id : 380574
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-08-07 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 270 ppb
Quant. Released: unknown
Date: unknown
Update Date: 1996-11-09 00:00:00
Update By: Not reported
Substance ID : 121781
Code : 79-01-6
Substance Name : TRICHLOROETHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : 8523
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8545
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317517
Sub Alias Name : ETHINYL TRICHLORIDE
Substance Alias ID : 317518
Sub Alias Name : ETHYLENE TRICHLORIDE
Substance Alias ID : 317519
Sub Alias Name : TCE
Substance Alias ID : 317520
Sub Alias Name : TRI-CLENE
Substance Alias ID : 317521
Sub Alias Name : TRICHLOROETHENE
Sampling Result ID : 342310
Feature Id : Not reported
Hazard Release Id : 380575

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CHEMCENTRAL PORTLAND (Continued)

EDR ID Number
EPA ID Number
Database(s)

1000296959

Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-08-07 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 120 ppb
Quant. Released: unknown
Date: unknown
Update Date: 1993-01-04 00:00:00
Update By: Not reported
Substance ID : 122014
Code : ECD281
Substance Name : VOLATILE ORGANIC COMPOUNDS (VOC)
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 344149
Feature Id : Not reported
Hazard Release Id : 383700
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1991-06-17 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 8 to 6500 ppb
Quant. Released: unknown
Date: unknown
Update Date: 1993-08-27 00:00:00
Update By: Not reported
Substance ID : 121051
Code : 1330-20-7
Substance Name : XYLENEs
Substance Abbrev. : Not reported
Substance Categ ID : 8526
Substance Sub Categ : Volatiles
Category Level : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317017
Sub Alias Name : DIMETHYLBENZENEs
Substance Alias ID : 317018
Sub Alias Name : XYLOLs
Sampling Result ID : 344696
Feature Id : Not reported
Hazard Release Id : 384335
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-08-27 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 4,400 ppm
Quant. Released: unknown
Date: unknown
Update Date: 1993-08-27 00:00:00
Update By: Not reported
Substance ID : 120781
Code : 100-41-4
Substance Name : ETHYLBENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8515
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316146
Sub Alias Name : ETHYLBENZOL
Substance Alias ID : 316147
Sub Alias Name : PHENYLETHANE
Sampling Result ID : 344697
Feature Id : Not reported
Hazard Release Id : 384336
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-08-27 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 930 ppm

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Quant. Released: unknown
Date: unknown
Update Date: 1993-08-27 00:00:00
Update By: Not reported
Substance ID : 120883
Code : 108-88-3
Substance Name : TOLUENE
Substance Abbrev. : Not reported
Substance Categ ID : 8520
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316466
Sub Alias Name : BENZENE,METHYL-
Substance Alias ID : 316467
Sub Alias Name : METHACIDE
Substance Alias ID : 316468
Sub Alias Name : METHYLBENZENE
Substance Alias ID : 316469
Sub Alias Name : METHYLBENZOL
Substance Alias ID : 316470
Sub Alias Name : PHENYLMETHANE
Substance Alias ID : 316471
Sub Alias Name : TOLUOL
Sampling Result ID : 344698
Feature Id : Not reported
Hazard Release Id : 384337
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-08-27 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 2800 ppm
Quant. Released: unknown
Date: unknown
Update Date: 1993-08-27 00:00:00
Update By: Not reported
Substance ID : 121011
Code : 127-18-4
Substance Name : TETRACHLOROETHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : 8519
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8551
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316912
Sub Alias Name : ETHENE,TETRACHLORO-
Substance Alias ID : 316913
Sub Alias Name : ETHYLENE TETRACHLORIDE
Substance Alias ID : 316914
Sub Alias Name : PERCHLOROETHYLENE
Substance Alias ID : 316915
Sub Alias Name : PERCLENNE
Substance Alias ID : 316916
Sub Alias Name : TETRACHLOROETHENE
Substance Alias ID : 316917
Sub Alias Name : TETRACHLOROETHENE,1,1,2,2-
Substance Alias ID : 316918
Sub Alias Name : TETRACHLOROETHYLENE,1,1,2,2-
Sampling Result ID : 342307
Feature Id : Not reported
Hazard Release Id : 384338
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-08-07 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 56 ppb
Sampling Result ID : 344699
Feature Id : Not reported
Hazard Release Id : 384338
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-08-27 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 1700 ppm

Alias Name: Not reported
Investigation Status: 207

NARR:

NARR ID: 5726722
NARR Code : Contamination

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments (4/1/93 ELB/SAS) Chemcentral Corporation has operated since 1965, and from 1965 to 1980 it conducted business under the name of Central Solvents and Chemicals Co. Chemcentral operates a distribution facility for commercial and industrial solvents in the St. Johns district of Portland. Solvents such as alcohols, ketones, esters, aromatic hydrocarbons and chlorinated hydrocarbons are received in bulk from railroad car and tanker truck. The solvents are stored on-site in USTs, blended to customer specification, and placed into 5 and 55 gallon containers. These containers are stored in an on-site warehouse prior to distribution to customers. A 1991 investigation by HartCrowser included the installation and sampling of three on-site monitoring wells. An off-site monitoring well was also sampled. Soil samples collected from the well borings did not reveal detectable levels of volatile organic compounds. Groundwater samples contained chlorinated and aromatic solvents. A major renovation is underway at the facility which includes the replacement of the 40 USTs with above-ground storage tanks, the installation of containment bulkheads, and the upgrading of the fire-suppression system. (8/19/97/LSK/SAS) Site re-evaluated as part of review of all sites within the Columbia Slough Study Area. Site is located about 0.5 miles southwest of Lower Slough.

1. Preliminary Assessment prepared by Hart Crowser (10/20/92) 2. SAS Strategy Recommendation (4/1/93)

solvents
UST releases - dates not known.
Soil and groundwater

Although groundwater beneath Chemcentral is contaminated with chlorinated solvents, groundwater may not be a significant exposure pathway. The property is in an industrialized area, with the nearest residences approximately 1/4 mile to the northeast.

Local residents are served with water supplied by the City of Portland. The groundwater gradient at the site is relatively flat but likely flows in a northerly direction towards the confluence of the Columbia and Willamette Rivers. Surface soils do not present a significant exposure pathway since public access to the site is limited by a secure fence that is locked at the close of business each day.

(4/1/93 ELB/SAS) Site Assessment has reviewed HartCrowser's PAE and has recommended a medium priority for further action. Groundwater has been impacted, but there appear to be insufficient receptors in the site vicinity to warrant a high priority. Although a detailed in-situ remediation plan has been proposed, the full extent of soil contamination has not been evaluated. The extent of soil contamination in the UST area should be fully evaluated. In addition, continued monitoring of groundwater for VOCs is also recommended. The Chemcentral site is a good candidate for the Voluntary Cleanup Program. Because of the presence of on-site contamination, the Chemcentral site should be included on DEQ's Confirmed Release List and Inventory. (10/17/00 DJP/VCP) Received RI workplan on December 7, 1998. DEQ letter requesting revision to workplan sent February 1, 1999. Received requested changes to workplan on March 3, 1999. Workplan approved by DEQ on May 4, 1999. Initial phase of RI completed

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CHEMCENTRAL PORTLAND (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000296959

October/November 1999. Off-site monitoring wells installed June 10, 2000.
Railroad spur investigation points installed and contaminated source area
identified at spur on June 6, 2000. Received progress report summarizing
investigation results on August 15, 2000.

NARR ID: 5726723
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5726724
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5726725
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5726726
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5726727
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5726728
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 132179
Site Name: Chemcentral Corp.
County Code : 26.00
Owner Name: Chemcentral Corp.
Owner Address: 10821 N Lombard ST
Portland, 97203
Lat/Long 45.6069 / -122.7663
Owner Code: LIS

FACA Id : 1271

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 709673

Action ID: 9440

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Agency ID :	Dept Of Environmental Quality	Start Date:	1998-03-16 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmd	Update Date:	1998-04-24 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	593		
Comments :	Not reported		

Admin ID:	709674	Action ID:	9442
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-03-16 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmd	Update Date:	1998-04-24 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	593		
Comments :	Not reported		

Admin ID:	710261	Action ID:	9470
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-01 00:00:00
Further Action:	High	Region ID:	Northwestern Region
Complete Date:	256	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1998-03-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	466		
Comments :	Site evaluated as part of review of sites near Columbia Slough; priority elevated from medium to high based on proximity to Slough and known groundwater contamination.		

Admin ID:	710264	Action ID:	9519
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-20 00:00:00
Further Action:	High	Region ID:	Northwestern Region
Complete Date:	256	Substance Code:	VCS
Rank Value:	9	Cleanup Flag:	False
Updated By:	jmd	Update Date:	1998-04-02 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	631		
Comments :	Reason in program: Columbia Slough Site		

Admin ID:	720746	Action ID:	9451
Agency ID :	Not reported	Start Date:	1994-04-26 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Quarterly Reports from HartCrowser (Fall 1993 and February 1994) Tank Removal and Initial Site Characterization Report - 8/93 TM Gates, Inc comments answered by Eric Blischke, VCS		

Admin ID:	715465	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-06-18 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CHEMCENTRAL PORTLAND (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000296959

Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Cleanup Flag: False
Update Date: 1995-08-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 715466
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9437
Start Date: 1992-06-19 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-08-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 715467
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 223
Comments : Not reported

Action ID: 9488
Start Date: 1994-06-22 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-04-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 715468
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 223
Comments : Not reported

Action ID: 9489
Start Date: 1994-06-22 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-04-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 721037
Agency ID : Dept Of Environmental Quality
Further Action: Medium
Complete Date: 258
Rank Value: 68
Updated By: kpd
Created By: Not reported
Employee Id: 649
Comments : Not reported

Action ID: 9517
Start Date: 1994-05-27 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-09-02 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 706917
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 593
Comments : FORMAL VCP AGREEMENT.

Action ID: 9440
Start Date: 1998-11-16 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1999-04-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 717090

Action ID: 9449

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Agency ID :	Dept Of Environmental Quality	Start Date:	1992-06-20 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1995-08-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	717091	Action ID:	9497
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-06-20 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-04-05 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	722957	Action ID:	9470
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-01 00:00:00
Further Action:	Medium	Region ID:	Headquarters
Complete Date:	258	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1997-04-03 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	223		
Comments :	Not reported		

Admin ID:	722958	Action ID:	9468
Agency ID :	Environmental Protection Agency	Start Date:	1984-10-29 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	722977	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-01 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1997-04-03 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	223		
Comments :	Not reported		

Admin ID:	722978	Action ID:	9499
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-04-01 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1997-04-03 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	223		
Comments :			

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Comments : Not reported

Admin ID:	723029	Action ID:	9444
Agency ID :	Environmental Protection Agency	Start Date:	1984-12-10 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	CONV	Update Date:	1994-09-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	702983	Action ID:	9491
Agency ID :	Dept Of Environmental Quality	Start Date:	1993-08-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2002-01-09 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	593		
Comments :	Not reported		

Admin ID:	708571	Action ID:	9459
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-04-23 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1998-12-01 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	593		
Comments :	Not reported		

Admin ID:	713670	Action ID:	9421
Agency ID :	Environmental Protection Agency	Start Date:	1981-04-17 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-09-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	718587	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1989-04-28 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1995-08-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	304		
Comments :	Not reported		

Admin ID:	718811	Action ID:	9448
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-06-10 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Updated By: dmc
Created By: Not reported
Employee Id: 223
Comments : Not reported
Update Date: 1997-04-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 718812
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 649
Comments : Not reported
Action ID: 9438
Start Date: 1994-06-23 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-08-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 718813
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 649
Comments : Not reported
Action ID: 9439
Start Date: 1994-06-23 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-08-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 719088
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 649
Comments : Not reported
Action ID: 9426
Start Date: 1994-05-26 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-08-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709385
Agency ID : Environmantal Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dxh
Created By: Not reported
Employee Id: Not reported
Comments : Not reported
Action ID: 9511
Start Date: 1981-04-17 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1998-03-20 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709387
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 593
Comments : VCP staff review of site information in progress. Recommendations regarding need for further site action will be presented in File Review Memo.
Action ID: 9484
Start Date: 1998-03-16 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1998-09-17 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 713818
Action ID: 9514

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Agency ID :	Environmental Protection Agency	Start Date:	1993-02-17 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-09-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	720001	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-03-14 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1995-08-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	657		
Comments :	Not reported		

Admin ID:	720002	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-03-14 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1995-08-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	657		
Comments :	Not reported		

Admin ID:	724679	Action ID:	9459
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-06-21 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1995-08-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

DISPOSAL:

Disposal ID:	Not reported
Medium :	Not reported
Treatment :	Not reported
Disposal Method:	Not reported
Start Date:	Not reported
Disposal Flag:	Not reported
Unit Code:	Not reported
Depth :	Not reported
Monitor :	Not reported
Manifest Num :	Not reported
Removed By :	Not reported
Loc Comments:	Not reported
Disposal Sub ID:	Not reported
Substance ID:	Not reported
Created By:	Not reported
Create Date:	Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Township Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 132179
Operation Status :Active
Common Name : Chemcentral Corp.
Yrs of Operation : 1965 to present
Comments : 1965 to present
Updated By : kpd
Updated Date : 1995-08-10 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:195638
SIC Code: 5169
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

LUST:

Facility ID: 26-93-0117
Region: North Western Region
Clean Lead: Not reported
Cleanup Start: 14JUL1993

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Closed Date: 07FEB1994
Cleanup Complete: 07FEB1994

OR SPILLS:

Facility ID:	Not reported	Spill Date:	09OCT1997
Material:	Not reported	Quantity:	Not reported
Release Date:	10/09/1997	Year:	97
How Occurred:	Not reported	OERS Number	Not reported
Source:	Not reported	Media	Not reported
Materials:	Not reported		
Location:	Not reported		
Description:	19 barrels (16 full) open top. Have been there up to 1 1/2 months. Turned out to be drums of contaminated soil awaiting disposal. False Alarm.		

OR CRL:

Facility ID: 878
Location ID: 1271
Status Code: LIS
Facility Status: REMEDIAL INVESTIGATION
Lat/Long: 45.6069 / -122.7663

OR VCS:

ECS Site ID: 878
Action: RI
Start Date: 03/16/19
End Date: Not reported
Program: VCS
CRL: LIS
Facility Size: Not reported
Project Manager Last Name: Pettit
Project Manager First Name: Don

HSIS:

Emergency Contact:	WILLIAM E CHELF
Emergency Procedure:	OFFICE STAFF CARS & PUMPHOUSE
Chemical Trade Name:	A-C WAX
Most Hazardous:	OXIDIZED LOW MOLE. WT. POLYETHYLENE
Manager Name:	WILLIAM E CHELF
Mailing Address:	10821 N LOMBARD ST PORTLAND, OR 97203
Mailing County:	MULTNOMAH
Day Phone:	5032865821
Employee File #:	015077
No. of Employees:	14
Placard:	Yes
Business Type:	INDUSTRIAL SOLVENTS & SPECIALTY CHEMICALS DISTRIBUTOR
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032865821
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	CHEMCENTRAL CORPORATION
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	04
Description Of The Avg Qnty Code:	50-199
Maximum Amount Possessed During The Year Code:	30

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Description Of The Max Qnty Code: 10,000-49,999
Applicable Unit Of Measure Code: 2
Description Of The Unit Of Measure: GALLONS
Storage Container:
Type Code: J
Description: BAG
Pressure of Hazardous Substance Code: 1
Temperature of The Hazardous Substance Code: 4
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: Not reported
Chemical Abstract Service Identifier Number: 68441178
First Hazardous Classification Code For Chemical: 4.5
Hazard Classification 1 Of The Chemical: Combustible Materials
Second Hazardous Classification Code For Chemical: Not reported
Hazard Classification 2 Of The Chemical: Not reported
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 1
Chemical Is An Extremely Hazardous Substance (ehs): No
Does The Chemical Contain A 112r Chemical: Not reported
Chemical Is A Toxic 313 Chemical: Not reported
EPA Pesticide Registration Number: Not reported
Sic Code: Not reported

Emergency Contact: WILLIAM E CHELF
Emergency Procedure: OFFICE STAFF CARS & PUMPHOUSE
Chemical Trade Name: ACETONE
Most Hazardous: ACETONE
Manager Name: WILLIAM E CHELF
Mailing Address: 10821 N LOMBARD ST
PORTLAND, OR 97203
Mailing County: MULTNOMAH
Day Phone: 5032865821
Employee File #: 015077
No. of Employees: 14
Placard: Yes
Business Type: INDUSTRIAL SOLVENTS & SPECIALTY CHEMICALS
DISTRIBUTOR
Sprinkler System: Yes
Date Form Completed: Not reported
Business Phone: 5032865821
Department Or Division Of Company: Not reported
Facility Has Written Emergency Plan: Yes
Company Name: CHEMCENTRAL CORPORATION
Fire Dept Code: 0291
Physical State : Not reported
Physical State Of The Substance: LIQUID
Average Amount Possessed During The Year Code: 31
Description Of The Avg Qnty Code: 50,000-99,999
Maximum Amount Possessed During The Year Code: 40
Description Of The Max Qnty Code: 100,000-249,999
Applicable Unit Of Measure Code: 1
Description Of The Unit Of Measure: POUNDS
Storage Container:
Type Code: A

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Description: ABOVEGROUND TANK
Pressure of Hazardous Substance Code: 1
Temperature of The Hazardous Substance Code: 4
Type of Code: D
Description of Code: STEEL DRUM
Pressure of Code: 1
Temperature of The Hazardous Substance Code: 4
Type of Code: Not reported
Description of Code: Not reported
Pressure of Code: Not reported
Temperature of The Hazardous Substance Code: Not reported
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 1090
Chemical Abstract Service Identifier Number: 67641
First Hazardous Classification Code For Chemical: 3.1
Hazard Classification 1 Of The Chemical: Flammable Liq.(FP<0F)
Second Hazardous Classification Code For Chemical: 6.3
Hazard Classification 2 Of The Chemical: Acute Health Hazard
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): No
Does The Chemical Contain A 112r Chemical: No
Chemical Is A Toxic 313 Chemical: Yes
EPA Pesticide Registration Number: Not reported
Sic Code: Not reported

Emergency Contact: WILLIAM E CHELF
Emergency Procedure: OFFICE STAFF CARS & PUMPHOUSE
Chemical Trade Name: AMP-95
Most Hazardous: 2-AMINO-2-METHYL-1-PROPANOL
Manager Name: WILLIAM E CHELF
Mailing Address: 10821 N LOMBARD ST
PORTLAND, OR 97203
Mailing County: MULTNOMAH
Day Phone: 5032865821
Employee File #: 015077
No. of Employees: 14
Placard: Yes
Business Type: INDUSTRIAL SOLVENTS & SPECIALTY CHEMICALS
DISTRIBUTOR
Sprinkler System: Yes
Date Form Completed: Not reported
Business Phone: 5032865821
Department Or Division Of Company: Not reported
Facility Has Written Emergency Plan: Yes
Company Name: CHEMCENTRAL CORPORATION
Fire Dept Code: 0291
Physical State : Not reported
Physical State Of The Substance: LIQUID
Average Amount Possessed During The Year Code: 11
Description Of The Avg Qnty Code: 500-999
Maximum Amount Possessed During The Year Code: 20
Description Of The Max Qnty Code: 1,000-4,999
Applicable Unit Of Measure Code: 2

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CHEMCENTRAL PORTLAND (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000296959

Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	D
Description:	STEEL DRUM
Pressure of Hazardous Substance Code:	1
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	2735
Chemical Abstract Service Identifier Number:	124685
First Hazardous Classification Code For Chemical:	4.5
Hazard Classification 1 Of The Chemical:	Combustible Materials
Second Hazardous Classification Code For Chemical:	6.3
Hazard Classification 2 Of The Chemical:	Acute Health Hazard
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Pure
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Sic Code:	Not reported
Emergency Contact:	WILLIAM E CHELF
Emergency Procedure:	OFFICE STAFF CARS & PUMPHOUSE
Chemical Trade Name:	CARBOWAX
Most Hazardous:	POLYETHYLENE GLYCOL
Manager Name:	WILLIAM E CHELF
Mailing Address:	10821 N LOMBARD ST PORTLAND, OR 97203
Mailing County:	MULTNOMAH
Day Phone:	5032865821
Employee File #:	015077
No. of Employees:	14
Placard:	Yes
Business Type:	INDUSTRIAL SOLVENTS & SPECIALTY CHEMICALS DISTRIBUTOR
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032865821
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	CHEMCENTRAL CORPORATION
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	04
Description Of The Avg Qnty Code:	50-199
Maximum Amount Possessed During The Year Code:	20
Description Of The Max Qnty Code:	1,000-4,999
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	J
Description:	BAG
Pressure of Hazardous Substance Code:	1

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Temperature of The Hazardous Substance Code: 4
Type of Code: D
Description of Code: STEEL DRUM
Pressure of Code: 1
Temperature of The Hazardous Substance Code: 4
Type of Code: Not reported
Description of Code: Not reported
Pressure of Code: Not reported
Temperature of The Hazardous Substance Code: Not reported
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: Not reported
Chemical Abstract Service Identifier Number: 25322683
First Hazardous Classification Code For Chemical: 9.0
Hazard Classification 1 Of The Chemical: Misc.Haz. Materials
Second Hazardous Classification Code For Chemical: Not reported
Hazard Classification 2 Of The Chemical: Not reported
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): No
Does The Chemical Contain A 112r Chemical: Not reported
Chemical Is A Toxic 313 Chemical: Not reported
EPA Pesticide Registration Number: Not reported
Sic Code: Not reported

Emergency Contact: WILLIAM E CHELF
Emergency Procedure: OFFICE STAFF CARS & PUMPHOUSE
Chemical Trade Name: CITRIC ACID
Most Hazardous: CITRIC ACID
Manager Name: WILLIAM E CHELF
Mailing Address: 10821 N LOMBARD ST
PORTLAND, OR 97203
Mailing County: MULTNOMAH
Day Phone: 5032865821
Employee File #: 015077
No. of Employees: 14
Placard: Yes
Business Type: INDUSTRIAL SOLVENTS & SPECIALTY CHEMICALS
DISTRIBUTOR
Sprinkler System: Yes
Date Form Completed: Not reported
Business Phone: 5032865821
Department Or Division Of Company: Not reported
Facility Has Written Emergency Plan: Yes
Company Name: CHEMCENTRAL CORPORATION
Fire Dept Code: 0291
Physical State : Not reported
Physical State Of The Substance: SOLID
Average Amount Possessed During The Year Code: 30
Description Of The Avg Qnty Code: 10,000-49,999
Maximum Amount Possessed During The Year Code: 30
Description Of The Max Qnty Code: 10,000-49,999
Applicable Unit Of Measure Code: 1
Description Of The Unit Of Measure: POUNDS
Storage Container:

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Type Code:	J
Description:	BAG
Pressure of Hazardous Substance Code:	1
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1759
Chemical Abstract Service Identifier Number:	77929
First Hazardous Classification Code For Chemical:	6.3
Hazard Classification 1 Of The Chemical:	Acute Health Hazard
Second Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 2 Of The Chemical:	Not reported
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Pure
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Sic Code:	Not reported

[Click this hyperlink](#) while viewing on your computer to access
98 additional OR HSIS record(s) in the EDR Site Report.

UST:

Facility ID:	6860
Facility Telephone:	(503) 286-5821
Permittee Name:	David Hoff
Active Tanks:	Not reported
Decommissioned Tanks:	40
Number of Permitted Tanks:	40
Number of Upgraded Tanks:	Not reported

AST:

Employer File Number:	015077
Hazardous Substance:	TEXANOL
Reporting Quantities:	5,000-9,999
Quantity Units:	GALLONS
Physical State:	LIQUID
Employer File Number:	015077
Hazardous Substance:	PROPYLENE GLYCOL
Reporting Quantities:	1,000-4,999
Quantity Units:	GALLONS
Physical State:	LIQUID
Employer File Number:	015077
Hazardous Substance:	TRITON
Reporting Quantities:	5,000-9,999
Quantity Units:	GALLONS
Physical State:	LIQUID
Employer File Number:	015077
Hazardous Substance:	ACETONE
Reporting Quantities:	100,000-249,999
Quantity Units:	POUNDS
Physical State:	LIQUID

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Employer File Number: 015077
Hazardous Substance: N-BUTYL ALCOHOL
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: N-BUTYL ACETATE
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: THINNER MS 100
Reporting Quantities: 5,000-9,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: THINNER 29
Reporting Quantities: 5,000-9,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: LACQUER THINNER SW-22
Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: GLYCOL ETHER EB
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: N-PROPYL ALCOHOL
Reporting Quantities: 5,000-9,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: METHANOL
Reporting Quantities: 100,000-249,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: V.M.&P. NAPHTHA
Reporting Quantities: 5,000-9,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: ISOBUTYL ACETATE

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

CHEMCENTRAL PORTLAND (Continued)

1000296959

Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: ODORLESS MINERAL SPIRITS
Reporting Quantities: 5,000-9,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: DTL THINNER
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: METHYL ETHYL KETONE
Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: ISOPROPYL ALCOHOL 99%
Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: HEXANE
Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: DENATURED ETHANOL
Reporting Quantities: 5,000-9,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: ISOPROPYL ACETATE
Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: N-PROPYL ACETATE
Reporting Quantities: 5,000-9,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: SOLVENT 100
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CHEMCENTRAL PORTLAND (Continued)

1000296959

Employer File Number: 015077
Hazardous Substance: MINERAL SPIRITS
Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: METHYL ISOBUTYL KETONE
Reporting Quantities: 500-999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: XYLENE
Reporting Quantities: 100,000-249,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: LACQUER DILUENT
Reporting Quantities: 10,000-49,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: TOLUENE
Reporting Quantities: 500,000-749,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: SOLVENT 142
Reporting Quantities: 5,000-9,999
Quantity Units: POUNDS
Physical State: LIQUID

Employer File Number: 015077
Hazardous Substance: PM ACETATE
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID

12
NE
1/2-1
3018 ft.

BORDEN INC
10915 N LOMBARD ST
PORTLAND, OR 97203

SHWS - ECSI 1002998972
CERC-NFRAP ORD042483610

Relative:
Higher

CERCLIS-NFRAP Classification Data:

Site Incident Category: Not reported

Non NPL Code: NFRAP

Ownership Status: Other

Federal Facility: Not a Federal Facility

Actual:
64 ft.

CERCLIS-NFRAP Assessment History:

Assessment: DISCOVERY

Assessment: PRELIMINARY ASSESSMENT

Assessment: SITE INSPECTION

Assessment: ARCHIVE SITE

NPL Status: Not on the NPL

Completed: 10/01/1982

Completed: 06/20/1985

Completed: 06/20/1985

Completed: 02/23/1993

CERCLIS-NFRAP Alias Name(s):

BORDEN CHEM PORTLAND A & C

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BORDEN INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1002998972

ECSI:

State ID Number:	1277	Brown ID	Not reported
Study Area:	False	Coordinator Supplier:	kpd
Cerclis ID:	042483610	Tax Lots:	Not reported
Size:	Not reported	NPL:	False
Orphan:	False	Region ID:	2
Lat/Long:	45.6077 / -122.766	Tax Lots:	Not reported
Township Coord.:	2.00	Township Zone:	N
Range Coord.:	1.00	Range Zone:	W
Section Coord.:	35	Qtr Section:	Not reported
Legislative :	35	Further Action:	258
FACA ID :	889	Score Value:	0
Update Date :	1998-05-18 00:00:00	Created Date:	CONV
Created Time :	1993-01-23 00:00:00		

HAZ RELEASED:

Quant. Released: unk.
Date: unk.
Update Date: 1996-05-28 00:00:00
Update By: Not reported
Substance ID : 121587
Code : 67-64-1
Substance Name : ACETONE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319114
Sub Alias Name : DIMETHYL KETONE
Substance Alias ID : 319115
Sub Alias Name : KETOPROPANE,beta-
Substance Alias ID : 319116
Sub Alias Name : PROPANONE,2-
Substance Alias ID : 319117
Sub Alias Name : PYROACETIC ETHER
Sampling Result ID : 342152
Feature Id : Not reported
Hazard Release Id : 380465
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1995-05-15 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-05-28 00:00:00
Sample Comment : 18 ppm
Quant. Released: unk.
Date: unk.
Update Date: 1996-05-28 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BORDEN INC (Continued)

1002998972

Update By: Not reported
Substance ID : 121700
Code : 75-34-3
Substance Name : DICHLOROETHANE,1,1-
Substance Abbrev. : Not reported
Substance Categ ID : 8548
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319361
Sub Alias Name : ETHANE,1,1-DICHLORO-
Substance Alias ID : 319362
Sub Alias Name : ETHYLIDENE CHLORIDE
Substance Alias ID : 319363
Sub Alias Name : ETHYLIDENE DICHLORIDE
Sampling Result ID : 342153
Feature Id : Not reported
Hazard Release Id : 380466
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-02-12 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-05-28 00:00:00
Sample Comment : 0.55 ppm
Quant. Released: unk.
Date: unk.
Update Date: 1996-05-28 00:00:00
Update By: Not reported
Substance ID : 121429
Code : 540-59-0
Substance Name : DICHLOROETHYLENE,1,2-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318702
Sub Alias Name : DICHLOROETHENE,1,2-
Sampling Result ID : 342154
Feature Id : Not reported
Hazard Release Id : 380467
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BORDEN INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1002998972

Sample Depth : Not reported
Start Date : 1996-02-12 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-05-28 00:00:00
Sample Comment : 1.5 ppm
Quant. Released: unk.
Date: unk.
Update Date: 1996-05-28 00:00:00
Update By: Not reported
Substance ID : 121689
Code : 75-00-3
Substance Name : CHLOROETHANE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319316
Sub Alias Name : CHLORETHYL
Substance Alias ID : 319317
Sub Alias Name : CHLORIDUM
Substance Alias ID : 319318
Sub Alias Name : CHLORYL
Substance Alias ID : 319319
Sub Alias Name : ETHER HYDROCHLORIC
Substance Alias ID : 319320
Sub Alias Name : ETHER MURIATIC
Substance Alias ID : 319321
Sub Alias Name : ETHYL CHLORIDE
Substance Alias ID : 319322
Sub Alias Name : HYDROCHLORIC ETHER
Substance Alias ID : 319323
Sub Alias Name : MONOCHLOROETHANE
Substance Alias ID : 319324
Sub Alias Name : MURIATIC ETHER
Sampling Result ID : 342155
Feature Id : Not reported
Hazard Release Id : 380468
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-02-12 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-05-28 00:00:00
Sample Comment : 0.23 ppm

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BORDEN INC (Continued)

1002998972

Quant. Released: unk.
Date: unk.
Update Date: 1996-05-28 00:00:00
Update By: Not reported
Substance ID : 121777
Code : 78-93-3
Substance Name : METHYL ETHYL KETONE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317507
Sub Alias Name : BUTANONE,2-
Substance Alias ID : 317508
Sub Alias Name : ETHYL METHYL KETONE
Substance Alias ID : 317509
Sub Alias Name : MEK
Substance Alias ID : 317510
Sub Alias Name : METHYL ACETONE
Sampling Result ID : 342156
Feature Id : Not reported
Hazard Release Id : 380469
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1995-05-15 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-05-28 00:00:00
Sample Comment : 4.8 ppm
Quant. Released: unk.
Date: unk.
Update Date: 1996-05-28 00:00:00
Update By: Not reported
Substance ID : 120883
Code : 108-88-3
Substance Name : TOLUENE
Substance Abbrev. : Not reported
Substance Categ ID : 8520
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316466
Sub Alias Name : BENZENE,METHYL-
Substance Alias ID : 316467
Sub Alias Name : METHACIDE
Substance Alias ID : 316468
Sub Alias Name : METHYLBENZENE

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BORDEN INC (Continued)

1002998972

Substance Alias ID : 316469
Sub Alias Name : METHYLBENZOL
Substance Alias ID : 316470
Sub Alias Name : PHENYLMETHANE
Substance Alias ID : 316471
Sub Alias Name : TOLUOL
Sampling Result ID : 342157
Feature Id : Not reported
Hazard Release Id : 380470
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1995-05-15 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-05-28 00:00:00
Sample Comment : 0.44 ppm
Quant. Released: unk.
Date: unk.
Update Date: 1996-05-28 00:00:00
Update By: Not reported
Substance ID : 120868
Code : 108-10-1
Substance Name : METHYL-2-PENTANONE,4-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316417
Sub Alias Name : HEXONE
Substance Alias ID : 316418
Sub Alias Name : ISOBUTYL METHYL KETONE
Substance Alias ID : 316419
Sub Alias Name : ISOPROPYLACETONE
Substance Alias ID : 316420
Sub Alias Name : METHYL ISOBUTYL KETONE
Substance Alias ID : 316421
Sub Alias Name : MIBK
Substance Alias ID : 316422
Sub Alias Name : PENTANONE,4-METHYL-2-
Sampling Result ID : 342158
Feature Id : Not reported
Hazard Release Id : 380471
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BORDEN INC (Continued)

1002998972

Sample Depth : Not reported
Start Date : 1995-08-11 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-05-28 00:00:00
Sample Comment : 1.3 ppm
Quant. Released: unk.
Date: unk.
Update Date: 1996-11-09 00:00:00
Update By: Not reported
Substance ID : 121011
Code : 127-18-4
Substance Name : TETRACHLOROETHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : 8519
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8551
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316912
Sub Alias Name : ETHENE,TETRACHLORO-
Substance Alias ID : 316913
Sub Alias Name : ETHYLENE TETRACHLORIDE
Substance Alias ID : 316914
Sub Alias Name : PERCHLOROETHYLENE
Substance Alias ID : 316915
Sub Alias Name : PERCLEN
Substance Alias ID : 316916
Sub Alias Name : TETRACHLOROETHENE
Substance Alias ID : 316917
Sub Alias Name : TETRACHLOROETHENE,1,1,2,2-
Substance Alias ID : 316918
Sub Alias Name : TETRACHLOROETHYLENE,1,1,2,2-
Sampling Result ID : 342311
Feature Id : Not reported
Hazard Release Id : 380576
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-08-07 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 0.041 ppm

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BORDEN INC (Continued)

1002998972

Quant. Released: unk.
Date: unk.
Update Date: 1996-11-09 00:00:00
Update By: Not reported
Substance ID : 121781
Code : 79-01-6
Substance Name : TRICHLOROETHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : 8523
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8545
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317517
Sub Alias Name : ETHINYL TRICHLORIDE
Substance Alias ID : 317518
Sub Alias Name : ETHYLENE TRICHLORIDE
Substance Alias ID : 317519
Sub Alias Name : TCE
Substance Alias ID : 317520
Sub Alias Name : TRI-CLENE
Substance Alias ID : 317521
Sub Alias Name : TRICHLOROETHENE
Sampling Result ID : 342312
Feature Id : Not reported
Hazard Release Id : 380577
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-08-07 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-09-11 00:00:00
Sample Comment : 0.067 ppm

Alias Name: Borden, Inc.
Investigation Status: 207

NARR:

NARR ID: 5732563
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR Comments Borden, Inc. has manufactured resin and glue products at this location since 1963, when it purchased the site from Arobol Manufacturing Co. (operations were

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BORDEN INC (Continued)

1002998972

similar to those of Borden). Layton Drum Co. owned and operated the site between 1947 and 19

59. There is little information about site contamination, except that a PA completed for the neighboring Chemcentral site (ECSI #878) included the installation of a monitoring well on Borden property. This well, sampled on a regular basis since 1993

, has contained a variety of chlorinated and alcohol-based solvents. The source of this contamination is not known, partly because groundwater movement is very slow and variable in this part of North Portland.

DEQ Site Investigation for Borden site, prepared for EPA Region 10, 11/84; correspondence between Borden and the City of Portland regarding wastewater treatment and disposal; "Preliminary Assessment CHEMCENTRAL/Portland," Hart Crowser, 10/92; Site I

Inspection Prioritization - Level I (letter report) by PRC Environmental Management, Inc. for EPA Region 10, 2/93.

chlorinated and alcohol-based solvents

Manner and time of release(s) unknown.

Although groundwater beneath this site contains a variety of solvents, groundwater may not be a significant exposure pathway. This is because Borden is located in an industrial area, with the nearest residences 0.25 mile northeast of the site, all o

f whom obtain drinking water from the City of Portland. The groundwater gradient at the site is nearly flat, and there are no known drinking water wells within a 3-mile radius.

In March 1993, EPA indicated that it planned no further action under the Federal Superfund program, and referred the site to DEQ for possible state action. Since 1991, sampling of a monitoring well on Borden's property has shown significant VOC cont

amination in groundwater, which may have originated from historical site operations. More information is needed on the site's history, chemical usage and handling practices, and human and environmental exposure pathways. In addition, characterizatio

n of groundwater and soil contamination across the site is needed. As a first step in this process, Site Assessment recommends an XPA, but under a low-to-medium priority due to the apparent lack of drinking water wells in the site vicinity. (11/10/9

7 LSK) Site re-evaluated as part of review of all sites within the Columbia Slough Study Area. Located about 0.5 miles southwest of the Lower Slough. Medium XPA recommended; however, may want to wait until VCS work on neighboring site, Chemcentral C

orp., is in progress.

There is evidence that this site has significant groundwater contamination from industrial solvents. Although there appears to be little potential for human exposure to these contaminants via drinking water, the site has not been fully characterized

, and there may be other exposure pathways of concern. More work is needed to evaluate potential exposure via surface water, direct contact, and air pathways.

NARR ID: 5732564
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5732565
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BORDEN INC (Continued)

1002998972

Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5732566
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5732567
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5732568
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5732569
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 132590 FACA Id : 889
Site Name: Borden Packaging and Industrial Products
County Code : 26.00
Owner Name: Arobol Manufacturing Co.
Owner Address: 10915 N Lombard ST
Portland, 97203
Lat/Long 45.6077 / -122.7669
Owner Code: LIS
Owner Site Num: 132591 FACA Id : 889
Site Name: Borden Packaging and Industrial Products
County Code : 26.00
Owner Name: Borden Inc.
Owner Address: 10915 N Lombard ST
Portland, 97203
Lat/Long 45.6077 / -122.7669
Owner Code: LIS
Owner Site Num: 132592 FACA Id : 889
Site Name: Borden Packaging and Industrial Products
County Code : 26.00
Owner Name: Layton Drum Co.
Owner Address: 10915 N Lombard ST
Portland, 97203
Lat/Long 45.6077 / -122.7669
Owner Code: LIS

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BORDEN INC (Continued)

1002998972

ADMIN ACT:

Admin ID: 704729
Agency ID : Dept Of Environmental Quality
Further Action: Medium
Complete Date: 258
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 466
Comments : Not reported

Action ID: 9510
Start Date: 1997-02-12 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-08-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 704730
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments : Not reported

Action ID: 9510
Start Date: 1996-05-29 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-08-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710869
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: GWISTAR
Created By: Not reported
Employee Id: 466
Comments : Not reported

Action ID: 9426
Start Date: 1997-02-12 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2003-05-30 16:31:56.
Create Date: 2002-12-17 08:50:22.

Admin ID: 716128
Agency ID : Environmantal Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9421
Start Date: 1982-10-01 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1995-09-15 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711617
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9465
Start Date: 1997-02-13 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-02-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 716433
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc

Action ID: 9424
Start Date: 1993-01-23 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-02-28 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BORDEN INC (Continued)

1002998972

Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 293
Comments : Not reported

Admin ID: 722218 Action ID: 9508
Agency ID : Dept Of Environmental Quality Start Date: 1994-02-12 00:00:00
Further Action: Not reported Region ID: Headquarters
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: dmc Update Date: 1996-02-28 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 293
Comments : Not reported

Admin ID: 712087 Action ID: 9438
Agency ID : Dept Of Environmental Quality Start Date: 1997-05-16 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: kvp Update Date: 1997-05-20 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 730
Comments : Not reported

Admin ID: 712693 Action ID: 9514
Agency ID : Environmantal Protection Agency Start Date: 1993-02-18 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: Not reported
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 1996-05-28 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: Not reported
Comments : Prepared by PRC Environmental Management, Inc.

Admin ID: 712694 Action ID: 9425
Agency ID : Dept Of Environmental Quality Start Date: 1996-05-24 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 1996-05-29 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 767
Comments : State screening.

Admin ID: 712695 Action ID: 9437
Agency ID : Dept Of Environmental Quality Start Date: 1996-05-28 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 1996-05-29 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 767
Comments : Not reported

Admin ID: 712696 Action ID: 9498
Agency ID : Dept Of Environmental Quality Start Date: 1996-05-29 00:00:00
Further Action: Not reported Region ID: Northwestern Region

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BORDEN INC (Continued)

1002998972

Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments : Not reported

Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-05-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 722975
Agency ID : Environmental Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: Not reported
Comments : State lead

Action ID: 9468
Start Date: 1985-02-11 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 723021
Agency ID : Environmental Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9444
Start Date: 1985-06-20 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 723400
Agency ID : Environmental Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9444
Start Date: 1993-03-30 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BORDEN INC (Continued)

1002998972

Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twtnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 132590
Operation Status :Inactive
Common Name : Arobol Manufacturing Co.
Yrs of Operation : 1959 to 1963
Comments : 1959 to 1963
Updated By : gmw
Updated Date : 1996-05-28 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196306
SIC Code: 2821
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:196310
SIC Code: 2891
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operation Id : 132591
Operation Status :Active
Common Name : Borden Inc.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BORDEN INC (Continued)

1002998972

Yrs of Operation : 1963 to present
Comments : 1963 to present
Updated By : gmw
Updated Date : 1996-05-28 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196305
SIC Code: 2821
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operations SIC Id: 196309
SIC Code: 2891
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operation Id : 132592
Operation Status : Inactive
Common Name : Layton Drum Co.
Yrs of Operation : 1947 to 1959
Comments : 1947 to 1959
Updated By : gmw
Updated Date : 1996-05-28 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196308
SIC Code: 3412
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

13
West
1/2-1
3029 ft.

WEST COAST ADHESIVE CO.
11104 NW FRONT AVE
PORTLAND, OR 97231

SHWS - ECSI S103841637
N/A

Relative:
Higher

Actual:
34 ft.

ECSI:

State ID Number: 333
Study Area: False
Cerculis ID: Not reported
Size: 10.73 acres
Orphan: False
Lat/Long: 45.6019 / -122.786
Township Coord.: 1.00
Range Coord.: 1.00
Section Coord.: 2
Legislative : 2
FACA ID : 1194
Update Date : 1998-05-12 00:00:00
Created Time : 1988-08-17 00:00:00

Brown ID Not reported
Coordinator Supplier: kpd
Tax Lots: 1N/1W-2 TL 8, 49, 27, 100
NPL: False
Region ID: 2
Tax Lots: 1N/1W-2 TL 8, 49, 27, 100
Township Zone: N
Range Zone: W
Qtr Section: BCC
Further Action: 260
Score Value: 0
Created Date: CONV

HAZ RELEASED:

Quant. Released: Not reported
Date: 1986
Update Date: 1988-08-17 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

WEST COAST ADHESIVE CO. (Continued)

S103841637

Substance ID : 121370
Code : 50-00-0
Substance Name : FORMALDEHYDE
Substance Abbrev. : Not reported
Substance Categ ID : 8516
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318542
Sub Alias Name : FORMALIN
Substance Alias ID : 318543
Sub Alias Name : FORMIC ALDEHYDE
Substance Alias ID : 318544
Sub Alias Name : METHANAL
Substance Alias ID : 318545
Sub Alias Name : METHYL ALDEHYDE
Substance Alias ID : 318546
Sub Alias Name : METHYLENE OXIDE
Substance Alias ID : 318547
Sub Alias Name : OXOMETHANE
Substance Alias ID : 318548
Sub Alias Name : OXYMETHYLENE
Sampling Result ID : 343329
Feature Id : Not reported
Hazard Release Id : 383808
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-01-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmd
Last Updated On : 1995-03-22 00:00:00
Sample Comment : 6.6 ppb
Sampling Result ID : 346901
Feature Id : Not reported
Hazard Release Id : 383808
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-01-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmd
Last Updated On : 1995-03-22 00:00:00
Sample Comment : 5.1 ppm

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

WEST COAST ADHESIVE CO. (Continued)

S103841637

Quant. Released: Not reported
Date: 1986
Update Date: 1988-08-17 00:00:00
Update By: Not reported
Substance ID : 120887
Code : 108-95-2
Substance Name : PHENOL
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316484
Sub Alias Name : BENZENE, HYDROXY-
Substance Alias ID : 316485
Sub Alias Name : CARBOLIC ACID
Substance Alias ID : 316486
Sub Alias Name : HYDROXYBENZENE
Substance Alias ID : 316487
Sub Alias Name : OXYBENZENE
Substance Alias ID : 316488
Sub Alias Name : PHENIC ACID
Substance Alias ID : 316489
Sub Alias Name : PHENYL HYDRATE
Substance Alias ID : 316490
Sub Alias Name : PHENYL HYDROXIDE
Sampling Result ID : 346234
Feature Id : Not reported
Hazard Release Id : 383809
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-01-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmd
Last Updated On : 1995-03-22 00:00:00
Sample Comment : 0.8 ppm
Quant. Released: unknown
Date: unknown
Update Date: 1995-03-22 00:00:00
Update By: Not reported
Substance ID : 121989
Code : ECD200
Substance Name : OIL OR FUEL RELATED COMPOUNDS
Substance Abbrev. : Not reported
Substance Categ ID : 8532
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

WEST COAST ADHESIVE CO. (Continued)

S103841637

Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 343328
Feature Id : Not reported
Hazard Release Id : 384781
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-01-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmd
Last Updated On : 1995-03-22 00:00:00
Sample Comment : 42,000 ppm

Alias Name: Burlington Northern RR - Linnton
Investigation Status: 208

NARR:

NARR ID: 5727208
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments DEQ investigated a complaint concerning odors and red substance on the ground after a spill occurred in 1986. In 1990, after West Coast Adhesives (WCA) discontinued operations and dismantled its tanks and other site structures, Glacier Park Company and Burlington Northern initiated surface and subsurface investigations on the property, including the northern portion where WCA had operated. The investigation on the WCA site consisted of six test pits/ trenches and four monitoring wells. High levels of formaldehyde and phenolic resins were found in soil, leading to the contractor's recommendation to remove up to 1,250 cubic yards of soil from this area. The contractor also found formaldehyde in at least one monitoring well. More recent sampling results (1/94) showed much lower levels of formaldehyde and phenols in subsurface soils, and a corresponding decrease in groundwater concentrations of formaldehyde. Other environmental concerns identified at the Burlington Northern site as a whole include a small area where an oily sludge was dumped, and three other areas containing stockpiles of sandblast grit. TCLP analyses of the sandblast material showed no detectable concentrations of cadmium, chromium, or lead. Source files, WQ, DEQ NW Region; "Report of Geoenvironmental Services; Supplemental Site Characterization and Preliminary Remedial Options," Geo Engineers, Inc. 2/23/95. phenol, formaldehydes, oil-range hydrocarbons Spill, 6/86. Soil and groundwater contamination have been documented, and either could result in contamination of surface water (Willamette River). Based on the much lower soil/groundwater formaldehyde concentrations in 1994 as compared to 1990, it appears that natural environmental degradation has occurred

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

WEST COAST ADHESIVE CO. (Continued)

S103841637

and that the 1990 recommendation to remove soil from the former WCA site may no longer be appropriate. However, Site Assessment recommends continued monitoring of the four on-site wells for formaldehyde, total phenols, and TPH/BTEX (due to the discovery of a slight sheen in one 1994 test pit, which may be associated with a current or former diesel UST). In addition, the oily sludge pile should be removed from the site, followed by confirmation sampling of soil beneath the pile. (5/29/01 GMW/SAS) The possibility of natural attenuation of phenols and formaldehyde, combined with the lack of on-site data since 1994, add up to an insufficient basis for adding this site to the Confirmed Release List. However, the further investigation needs described above remain in effect.

NARR ID: 5727209
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727210
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727211
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727212
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5727213
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 131757
Site Name: West Coast Adhesive Co.
County Code : 26.00
Owner Name: West Coast Adhesive Co.
Owner Address: 11104 NW Front AVE
Portland, 97231
Lat/Long 45.6019 / -122.7861
Owner Code: SUS

FACA Id : 1194

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

WEST COAST ADHESIVE CO. (Continued)

S103841637

ADMIN ACT:

Admin ID: 720109
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9445
Start Date: 1988-11-30 00:00:00
Region ID: Not reported
Substance Code: SAS
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 721480
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: 304
Comments : Not reported

Action ID: 9425
Start Date: 1989-01-31 00:00:00
Region ID: Not reported
Substance Code: SAS
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 700350
Agency ID : Dept Of Environmental Quality
Further Action: Low
Complete Date: 260
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 767
Comments : Not reported

Action ID: 9501
Start Date: 1995-03-15 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-10-06 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 716771
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmd
Created By: Not reported
Employee Id: 767
Comments : Not reported

Action ID: 9426
Start Date: 1995-03-01 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-03-22 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 718230
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: 26
Comments : Not reported

Action ID: 9424
Start Date: 1988-08-17 00:00:00
Region ID: Not reported
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-03-17 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 722935
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV

Action ID: 9437
Start Date: 1989-01-31 00:00:00
Region ID: Not reported
Substance Code: SAS
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

WEST COAST ADHESIVE CO. (Continued)

S103841637

Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 304
Comments : Not reported

Admin ID: 722936 Action ID: 9498
Agency ID : Dept Of Environmental Quality Start Date: 1989-01-31 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: CONV Update Date: 1994-09-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 304
Comments : Not reported

Admin ID: 704222 Action ID: 9449
Agency ID : Dept Of Environmental Quality Start Date: 2001-05-29 00:00:00
Further Action: Not reported Region ID: Headquarters
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 2001-05-29 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 767
Comments : Not reported

Admin ID: 720009 Action ID: 9431
Agency ID : Dept Of Environmental Quality Start Date: 1994-03-18 00:00:00
Further Action: Not reported Region ID: Not reported
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 2001-05-29 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 649
Comments : pending further evaluation

DISPOSAL:
Disposal ID: Not reported Feature ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported End Date: Not reported
Disposal Flag: Not reported Disposal Qty: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

FEATURE:
Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

WEST COAST ADHESIVE CO. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103841637

Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 131757
Operation Status :Inactive
Common Name : West Coast Adhesive Co.
Yrs of Operation : Late 1950s to 1990
Comments : Late 1950s to 1990
Updated By : jmd
Updated Date : 1995-03-22 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:195288
SIC Code: 2891
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

14
East
1/2-1
3038 ft.

CROWN CORK & SEAL CO PLANT 87
10200 N LOMBARD ST
PORTLAND, OR 97203

FINDS 1000412937
RCRIS-LQG 97203CNTNN12
TRIS
CORRACTS

Relative:
Higher

CORRACTS Data:

Actual:
102 ft.

EPA Id: ORD009024613
Region: 10
Area Name: ENTIRE FACILITY
Actual Date: 03/20/1997

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CROWN CORK & SEAL CO PLANT 87 (Continued)

1000412937

Corrective Action: CA070NO - RFA Determination Of Need For An RFI, RFI is Not Necessary
2002 NAICS Title: Metal Can Manufacturing

EPA Id: ORD009024613
Region: 10
Area Name: ENTIRE FACILITY
Actual Date: 03/20/1997
Corrective Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
2002 NAICS Title: Metal Can Manufacturing

RCRIS Corrective Action Summary:

Event: RFA Determination Of Need For An RFI, RFI is Not Necessary;
Event Date: 03/20/1997

Event: CA Prioritization, Facility or area was assigned a low corrective action priority.
Event Date: 03/20/1997

RCRIS:

Owner: CROWN CORK & SEAL CO USA INC
(215) 698-5100
EPA ID: ORD009024613
Contact: JON DAVIDSON
(503) 240-4268

Classification: Large Quantity Generator
TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 2001

<u>Waste</u>	<u>Quantity (Lbs)</u>	<u>Waste</u>	<u>Quantity (Lbs)</u>
D001	53831.80	D018	42378.60
D035	492.80	F001	5337.20
F003	59169.00	F005	59169.00

Violation Status: Violations exist

Regulation Violated: 40 CFR 262.11
Area of Violation: GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined: 07/17/2000
Actual Date Achieved Compliance: 09/06/2000

Regulation Violated: 40 CFR 262.34(c)(1)(i)
Area of Violation: GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined: 07/17/2000
Actual Date Achieved Compliance: 09/06/2000

Regulation Violated: 40 CFR 262.34(a)(2)
Area of Violation: GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined: 07/17/2000
Actual Date Achieved Compliance: 09/06/2000

Regulation Violated: 40 CFR 262.34(c)(1)(ii)
Area of Violation: GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined: 07/17/2000
Actual Date Achieved Compliance: 09/06/2000

Regulation Violated: 40 CFR 265.52(d)
Area of Violation: GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined: 07/17/2000

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CROWN CORK & SEAL CO PLANT 87 (Continued)

EDR ID Number
EPA ID Number
Database(s)

1000412937

Actual Date Achieved Compliance:	09/06/2000
Regulation Violated:	40 CFR 262.34(a)(4)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	07/17/2000
Actual Date Achieved Compliance:	09/06/2000
Regulation Violated:	40 CFR 262.34(a)(4)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	07/17/2000
Actual Date Achieved Compliance:	09/06/2000
Regulation Violated:	40 CFR 262.34(a)(1)(i)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	07/17/2000
Actual Date Achieved Compliance:	09/06/2000
Regulation Violated:	Not reported
Area of Violation:	TSD-PREPAREDNESS/PREVENTION REQUIREMENTS
Date Violation Determined:	03/21/1996
Actual Date Achieved Compliance:	05/20/1996
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-MANIFEST REQUIREMENTS
Date Violation Determined:	03/21/1996
Actual Date Achieved Compliance:	05/20/1996
Regulation Violated:	Not reported
Area of Violation:	TSD-CONTAINERS REQUIREMENTS
Date Violation Determined:	03/21/1996
Actual Date Achieved Compliance:	05/20/1996
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	06/01/1989
Actual Date Achieved Compliance:	08/14/1989
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	03/10/1987
Actual Date Achieved Compliance:	05/01/1987
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	03/10/1987
Actual Date Achieved Compliance:	05/01/1987
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	02/11/1985
Actual Date Achieved Compliance:	03/20/1985
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	08/23/1984
Actual Date Achieved Compliance:	12/01/1984
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	08/23/1984
Actual Date Achieved Compliance:	12/01/1984

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CROWN CORK & SEAL CO PLANT 87 (Continued)

1000412937

Penalty Summary:

Penalty Description	Penalty Date	Penalty Amount	Lead Agency
Proposed Monetary Penalty	7/6/2001	3600	STATE

There are 17 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
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FINDS:

Other Pertinent Environmental Activity Identified at Site:
Aerometric Information Retrieval System/AIRS Facility Subsystem
National Compliance Data Base
National Emissions Inventory
National Emissions Trends
National Toxics Inventory
Oregon Department of Environmental Quality
Resource Conservation and Recovery Act Information system
Toxics Release Inventory

15
SW
1/2-1
3119 ft.

BP WEST COAST PRODUCTS
9930 NW ST HELENS RD
PORTLAND, OR 97231

SHWS - ECSI 1000327409
FINDS ORD052216603
HSIS
OR CRL
RCRIS-LQG
OR HAZMAT
AST
OR VCS

Relative:
Higher

Actual:
51 ft.

RCRIS:

Owner: BP WEST COAST PRODUCTS
(630) 836-6880
EPA ID: ORD052216603
Contact: STEVE NOLL
(503) 286-8257

Classification: Large Quantity Generator
TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 2001

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	3141.60	D018	3599.20

Violation Status: Violations exist

Regulation Violated:	Not reported
Area of Violation:	GENERATOR-OTHER REQUIREMENTS
Date Violation Determined:	12/18/1995
Actual Date Achieved Compliance:	02/16/2000
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-RECORDKEEPING REQUIREMENTS
Date Violation Determined:	12/18/1995
Actual Date Achieved Compliance:	02/16/2000

Penalty Summary:

Penalty Description	Penalty Date	Penalty Amount	Lead Agency
Proposed Monetary Penalty	5/17/1996	12063	STATE

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BP WEST COAST PRODUCTS (Continued)

1000327409

There are 2 violation record(s) reported at this site:

Evaluation Area of Violation

Date of
Compliance

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Aerometric Information Retrieval System/AIRS Facility Subsystem
National Emissions Inventory
National Emissions Trends
National Toxics Inventory
Oregon Department of Environmental Quality
Permit Compliance System
Resource Conservation and Recovery Act Information system
Toxics Release Inventory

ECSI:

State ID Number:	1528	Brown ID	Not reported
Study Area:	False	Coordinator Supplier:	jmw
Cerclis ID:	Not reported	Tax Lots:	48
Size:	14.21 acres	NPL:	False
Orphan:	False	Region ID:	2
Lat/Long:	45.5930 / -122.777	Tax Lots:	48
Township Coord.:	1.00	Township Zone:	N
Range Coord.:	1.00	Range Zone:	W
Section Coord.:	2	Qtr Section:	Not reported
Legislative :	2	Further Action:	Not reported
FACA ID :	8988	Score Value:	0
Update Date :	2002-11-20 00:00:00	Created Date:	CONV
Created Time :	1994-03-28 00:00:00		

HAZ RELEASED:

Quant. Released: unknown
Date: unknown
Update Date: 1993-05-02 00:00:00
Update By: Not reported
Substance ID : 121982
Code : ECD169
Substance Name : DIESEL - FUEL OIL
Substance Abbrev. : Not reported
Substance Categ ID : 8529
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 344765
Feature Id : Not reported
Hazard Release Id : 384387
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-01-18 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 36,000 ppm
Sampling Result ID : 344766
Feature Id : Not reported
Hazard Release Id : 384387
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : True
Owner Operator : False
Lab Data : False
Sample Depth : Not reported
Start Date : 1993-06-18 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 100% (free product)
Quant. Released: unknown
Date: unknown
Update Date: 1993-05-02 00:00:00
Update By: Not reported
Substance ID : 121983
Code : ECD173
Substance Name : GASOLINE
Substance Abbrev. : Not reported
Substance Categ ID : 8530
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 344767
Feature Id : Not reported
Hazard Release Id : 384388
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1993-01-18 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : 500 ppm

Alias Name: ARCO Linnton Terminal
 BP Atlantic Richfield Company
 Portland Harbor Sediments

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

Investigation Status: 207

NARR:

NARR ID: 5733986

NARR Code : Contamination

Created By: Not reported

Create Date: 2002-12-17 08:50:04

Updated By: Not reported

Updated Date: 2002-12-17 08:50:04

NARR Comments (6/30/94 GMW) The facility has 26 above-ground storage tanks containing gasoline, diesel, lube oil, and additives. Files from DEQ's Northwest Region office indicate that during the 1960s and early 1970s there were a number of complaints about seepage or discharge of petroleum into the Willamette River. To prevent further releases, ARCO installed an 800-foot concrete retaining wall along the river and placed four "interceptor" wells along the base of this seawall. The interceptor wells were designed to extract free product from groundwater before it entered the river, and remain in operation today. On July 12, 1991, ARCO reported a leak in a buried diesel pipeline. Although the total volume of diesel released is unknown, ARCO's contractor recovered 750 gallons of product from a sump installed around the piping repair. In 1993, about 1,800 tons of petroleum-contaminated soil were removed from the site, some of which came from the area around the 1991 diesel release. Excavations from three other areas on-site contributed to this accumulation of contaminated soil, including: 1) the March 1992 construction of a new railroad spur; 2) the June 1992 trenching for a new pipeline; and 3) the December 1992 removal of a waste oil tank. Also in 1993, Geraghty & Miller (G&M) installed five monitoring wells on-site. In well P-11, G&M measured a free-product thickness of up to 12.42 feet. All four interceptor wells contained free product, ranging from 0.85 to 1.7 feet. "Site Characterization and System Evaluation Report, ARCO Terminal Station No. T22, 9930 NW St Helens Rd, Portland, Oregon" - Geraghty & Miller, 3/25/94; "Results of First Quarter 1997 Groundwater Monitoring and Sampling ARCO Terminal No. 22T", Geraghty & Miller, 7/8/97. Petroleum products Releases from historical operations, above-ground tanks, underground pipelines, product transfer. Time of release: unknown; potentially 1963 to present. Substantial contamination of groundwater (6/30/94 GMW) There is significant groundwater contamination beneath this site, with free product documented in at least six on-site wells, at up to 12.5 feet. The interceptor wells were installed over 20 years ago, and it is not clear how effective they are in preventing seepage of petroleum into the river. The presence of substantial layers of floating product at a few data points, and the size of the site point to the possibility of a widespread floating product plume. Therefore, Site Assessment recommends an RI/FS at the site, to determine the extent of groundwater contamination, and to evaluate remedial options. This action warrants a medium-to-high priority because of the magnitude of known contamination, and because continuing degradation of the Willamette River is the likely consequence of inaction. (9/20/00 TBG/VCP) Voluntary Agreement for Remedial Investigation and Source Control Measures signed June 20, 2000. RI proposal submitted July 18, 2000. (3/26/01 TBG/VCP) RI work plan submitted November 16, 2000, with field work beginning January 2001.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

(11/19/01 TBG/VCP) RI field work, Level I Ecological Risk Assessment (10/3/01), and Beneficial Water Use Determination (10/3/01) are complete. (10/30/02 TBG/VCP) The Draft and Final Remedial Investigation (RI) Reports were submitted in April and October 2002, respectively, including a Human Health Risk Assessment and a Level II Ecological Risk Assessment. Additional source control measures were proposed in September 2002, to provide better capture and removal of liquid-phase hydrocarbons on-site. Because groundwater at this site eventually discharges to the Willamette River, the surface water pathway is the most threatened.

NARR ID: 5733987
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5733988
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5733989
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5733990
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5733991
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: GWISTAR
Updated Date: 2003-01-14 10:10:05
NARR ID: 5733992
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 132858
Site Name: ARCO Bulk Terminal 22T
County Code : 26.00
Owner Name: ARCO Bulk Terminal
Owner Address: 9930 NW St. Helens RD
Burlington, 97231
Lat/Long 45.5930 / -122.7777
Owner Code: LIS

FACA Id : 8988

PERMIT:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BP WEST COAST PRODUCTS (Continued)

1000327409

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 704981
Agency ID: Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: GWISTAR
Created By: Not reported
Employee Id: 2157
Comments: RI field work completed October 3, 2001.

Action ID: 9484
Start Date: 2000-06-20 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-01-14 10:10:15.
Create Date: 2002-12-17 08:50:22.

Admin ID: 714587
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 767
Comments: Not reported

Action ID: 9448
Start Date: 1994-10-18 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-01-30 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711056
Agency ID: Dept Of Environmental Quality
Further Action: High-Medium
Complete Date: 257
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 624
Comments: Facility referred to the Site Response Program.

Action ID: 9476
Start Date: 1997-01-14 00:00:00
Region ID: Northwestern Region
Substance Code: HW
Cleanup Flag: False
Update Date: 1998-03-16 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 706151
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2157
Comments: Not reported

Action ID: 9442
Start Date: 2000-02-29 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2000-09-20 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 706152
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2157
Comments: Voluntary Agreement for RI and Scope of Work.

Action ID: 9440
Start Date: 2000-02-29 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2000-09-20 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 716657
Agency ID: Dept Of Environmental Quality
Further Action: Not reported

Action ID: 9424
Start Date: 1994-03-28 00:00:00
Region ID: Northwestern Region

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site	Database(s)	EDR ID Number	EPA ID Number
BP WEST COAST PRODUCTS (Continued)		1000327409	
Complete Date: Not reported	Substance Code: SAS		
Rank Value: 0	Cleanup Flag: False		
Updated By: dmc	Update Date: 1996-01-26 00:00:00		
Created By: Not reported	Create Date: 2002-12-17 08:50:22.		
Employee Id: 767			
Comments : Not reported			
Admin ID: 717539	Action ID: 9459		
Agency ID : Dept Of Environmental Quality	Start Date: 1993-07-27 00:00:00		
Further Action: Not reported	Region ID: Northwestern Region		
Complete Date: Not reported	Substance Code: SAS		
Rank Value: 0	Cleanup Flag: False		
Updated By: dmc	Update Date: 1995-09-15 00:00:00		
Created By: Not reported	Create Date: 2002-12-17 08:50:22.		
Employee Id: 767			
Comments : Not reported			
Admin ID: 702677	Action ID: 9409		
Agency ID : Dept Of Environmental Quality	Start Date: 2001-10-03 00:00:00		
Further Action: Not reported	Region ID: Northwestern Region		
Complete Date: Not reported	Substance Code: VCS		
Rank Value: 0	Cleanup Flag: False		
Updated By: jmw	Update Date: 2001-11-27 00:00:00		
Created By: Not reported	Create Date: 2002-12-17 08:50:22.		
Employee Id: 2157			
Comments : Beneficial Water Use Determination completed October 2001.			
Admin ID: 703150	Action ID: 9423		
Agency ID : Dept Of Environmental Quality	Start Date: 2001-10-03 00:00:00		
Further Action: Not reported	Region ID: Northwestern Region		
Complete Date: Not reported	Substance Code: VCS		
Rank Value: 0	Cleanup Flag: False		
Updated By: gmw	Update Date: 2002-01-28 00:00:00		
Created By: Not reported	Create Date: 2002-12-17 08:50:22.		
Employee Id: 2157			
Comments : Level 1 Ecological Risk Assessment completed October 2001.			
Admin ID: 718973	Action ID: 9425		
Agency ID : Dept Of Environmental Quality	Start Date: 1993-07-27 00:00:00		
Further Action: Not reported	Region ID: Northwestern Region		
Complete Date: Not reported	Substance Code: SAS		
Rank Value: 0	Cleanup Flag: False		
Updated By: dmc	Update Date: 1995-09-15 00:00:00		
Created By: Not reported	Create Date: 2002-12-17 08:50:22.		
Employee Id: 767			
Comments : Not reported			
Admin ID: 718974	Action ID: 9437		
Agency ID : Dept Of Environmental Quality	Start Date: 1994-06-29 00:00:00		
Further Action: Not reported	Region ID: Northwestern Region		
Complete Date: Not reported	Substance Code: SAS		
Rank Value: 0	Cleanup Flag: False		
Updated By: dmc	Update Date: 1995-09-15 00:00:00		
Created By: Not reported	Create Date: 2002-12-17 08:50:22.		
Employee Id: 767			
Comments : Not reported			

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BP WEST COAST PRODUCTS (Continued)

1000327409

Admin ID:	719018	Action ID:	9499
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-06-30 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-09-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	See strategy recommendation for pathway information.		

Admin ID:	719019	Action ID:	9503
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-07-01 00:00:00
Further Action:	High-Medium	Region ID:	Northwestern Region
Complete Date:	257	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1998-03-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	12/17/97 Bill Robertson, current project manager.		

Admin ID:	719022	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-06-30 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-09-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		

Admin ID:	719267	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-08-26 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1996-01-30 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		

Admin ID:	719268	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-08-26 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1996-01-30 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		

Admin ID:	719429	Action ID:	9488
Agency ID :	Dept Of Environmental Quality	Start Date:	1994-10-19 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1996-01-30 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

Created By: Not reported
Employee Id: 767
Comments : Not reported
Create Date: 2002-12-17 08:50:22.

Admin ID: 719430
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 767
Comments : Not reported
Action ID: 9489
Start Date: 1994-10-19 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-01-30 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 719431
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 649
Comments : Not reported
Action ID: 9438
Start Date: 1994-10-24 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-01-30 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 719432
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 649
Comments : Not reported
Action ID: 9439
Start Date: 1994-10-24 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1996-01-30 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:
Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported
Feature ID: Not reported
End Date: Not reported
Disposal Qty: Not reported

FEATURE:
Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twtnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 132858
Operation Status :Active
Common Name : ARCO Bulk Terminal
Yrs of Operation : 1963 to present
Comments : 1963 to present
Updated By : jxh
Updated Date : 1995-03-16 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:195811
SIC Code: 2911
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

HAZMAT:

Facility ID: 0291-870348
Incident District: PORTLAND
Incident Day: Thu
Alarm Time: 12/30/99
Back in Service: 12/30/99
Responsible Party:G K LAVOERBACH
930 NW ST HELENS ROAD
PORTLAND, OR 97231
RP Phone: 503-286-8257

Dept Resp: PORTLAND FIRE BUREAU
Arrival Time: 12/30/99
Company: ARCO LOADING RACK

RP Phone 2: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BP WEST COAST PRODUCTS (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000327409

Scene Type:	Not reported	Area Type:	Not reported
Wind Direction:	Not reported	Wind Speed:	Not reported
WFair:	True		
Num U Desc:	Not reported	Num U Fire:	1
Num U Local:	0	Num U State:	0
Num U Police:	3	Num U Public Wks:	0
Num U Amb:	0	Num U Agency:	0
Num U Federal:	0	Num U RR:	0
Num U Other:	1		
Act Secure Area:	True	Act Crowd Control:	False
Act Hot Zone:	False		
Act on Site:	True	Act Transport:	False
Sol Com Vehicle:	False	Mi Fuel:	False
Chemical:	GASOLINE		
Num Cont 1:	0	Size Cont 1:	0
Num Cont 2:	0	Size Cont 2:	0
Num Cont 3:	0	Size Cont 3:	0
Num Cont 4:	Not reported	Size Cont 4:	Not reported
Num Cont 5:	Not reported	Size Cont 5:	Not reported
Amt Rsk G1:	0	Amt Rel G1:	0
Amt Rsk G2:	0	Amt Rel G2:	0
Amt Rsk G3:	0	Amt Rel G3:	0
Amt Rsk G4:	0	Amt Rel G4:	0
Amt Rsk G5:	0		
Mu Chem Trec:	False	Mu Ship Papers:	False
Mu Placards:	False	Mu On Scene Test:	False
Mu Other Desc:	Not reported		
Vehical Plus:	3500	Fixed Property:	2500
Fire Inj:	0	Fire Death:	0
Fire Decon:	0	Fire Treat:	0
Fire Hopital:	0		
Civ Inj:	0	Civ Death:	1
Civ Decon:	0	Civ Treat:	0
Civ Hopital:	0		
Other Inj:	0	Other Death:	0
Other Decon:	0	Other Treat:	0
Other Hopital:	0		
Person File:	WILLIAM KNOTTS	Title Person File:	LT E-16-C
Agency:	PORTLAND F/B	Agency ID:	Not reported
Num U Deq:	0	Inc Num Short:	870348
Hazmat Team:	Not reported	Hazmat local:	F
Hazmat State:	F	Agency Phone:	503-248-0203
ID Number:	02-291	OERS Number:	Not reported
Dept Rsp 2:	Not reported		
St Pub Road:	False	St Pub Struct:	False
St Pub Land:	False	St Forest:	False
St Other:	False		
St Pri Road:	False	St Pri Struct:	True
St Waterway:	False	St Pri Land:	False
A Industrial:	True	A Residential:	False
A Forest:	False	A commercial:	False
A Rural Agri:	False		
W Rain:	False	W Fog:	False
W Snow Ice:	False		
W Sunny:	False	W Other Desc:	Not reported
Act Activate Oers:	False	Act Traffic:	False
Act Exiting:	True	Act ID Hazmat:	False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BP WEST COAST PRODUCTS (Continued)

1000327409

Act Evacuate:	False	Act Decontam:	False
Act Evaluate:	False	Act Cleanup:	False
Act Pub Info:	True	Act Remote Haz:	False
Soi Drug Lab:	False	Soi Car:	True
Soi Fixed Facility:	False	Soi Train:	False
Soi Pipeline:	False	Soi Ship:	False
Soi Aircraft:	False	Soi Other:	F
Soi Desc:	F	Soi Other Desc:	Not reported
Mi Cargo:	False	Mi Product:	False
Mi Waste Mat:	False		
Coi Normal Op:	False	Coi Dur Fire:	False
Coi Dur Storage:	False	Coi Excavation:	False
Coi Railcar:	False	Coi MVA:	False
Coi Durmanuf:	False	Coi Unauthor:	False
Coi Derailment:	False	Coi Dur Repair:	False
Coi Abandon:	False	Coi in Transit:	False
Coi Docked:	False	Coi Mat not Rel:	False
Amt Rilb1:	0	Amt Ricf1:	0
Amt Rilb2:	0	Amt Ricf2:	0
Amt Rilb3:	0	Amt Ricf3:	0
Amt Rilb4:	0	Amt Ricf4:	0
Amt Rilb5:	0	Amt Ricf5:	0
A Other:	F	Num U State Ag:	0
Amt Rsk P1:	0	Amt Rsk C1:	0
Amt Rsk P2:	0	Amt Rsk C2:	0
Amt Rsk P3:	0	Amt Rsk C3:	0
Amt Rsk P4:	0	Amt Rsk C4:	0
Amt Rsk P5:	0	Amt Rsk C5:	0
Mu Sfm Hazcom:	False	Mu Off Scene:	False
Mu Text Book:	F	Mu Other:	True
Mu Resp Party:	F		
FD Id:	0291		
Incident Date:	01/15/87		
Agency Report # :	Not reported		
Hmb Cont Fire:	False	Hmb Cause Fire:	True
In Route :	12/30/99		
Date Added:	Not reported		
ID Number:	9930		
Prefix:	NW		
Suffix:	RD		
Street:	ST HELENS		
Street Type:	RD		
Unit:	Not reported		
Hmb Caus Explo:	True	Hmb Cont Explo:	False
Hmb Inert No React:	False		
Hmb Bec Airborne:	False		
Hmb Contam Area:	False		
Hmb Entered Water:	False		
Comments :			

INVESTIGATION IS UNDERWAY. A FLASH FIRE OCCURED WHEN DRIVER OPENED MIDDLE COMPARTMENT OF THREE COMPARTMENT TRUCK. COMPARTMENTS PREVIOUS LOAD HAD BEEN GASOLINE. DRIVER WAS PREPARING IT TO LOAD DIESEL FUEL. SOME DIESEL FUEL APPARENTLY SPILLED FROM FILL

OR CRL:

Facility ID: 1528
Location ID: 8988
Status Code: LIS
Facility Status: REMEDIAL INVESTIGATION

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BP WEST COAST PRODUCTS (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000327409

Lat/Long: 45.593 / -122.7777

OR VCS:

ECS Site ID: 1528
Action: RI
Start Date: 06/20/20
End Date: Not reported
Program: VCS
CRL: LIS
Facility Size: 14.21 acres
Project Manager Last Name: Gainer
Project Manager First Name: Tom

HSIS:

Emergency Contact: STEVE NOLL
Emergency Procedure: MAIN OFFICE
Chemical Trade Name: ACETYLENE
Most Hazardous: ACETYLENE
Manager Name: STEVE NOLL
Mailing Address: PO BOX 83409 LINTON STATION
PORTLAND, OR 97283
Mailing County: MULTNOMAH
Day Phone: 5032868257
Employee File #: 015123
No. of Employees: 32
Placard: Yes
Business Type: PETROLIUM PRODUCT DISTRIBUTION
Sprinkler System: Yes
Date Form Completed: Not reported
Business Phone: 5032868257
Department Or Division Of Company: Not reported
Facility Has Written Emergency Plan: Yes
Company Name: BP WEST COAST PRODUCTS CO
Fire Dept Code: 0291
Physical State : Not reported
Physical State Of The Substance: GAS
Average Amount Possessed During The Year Code: 10
Description Of The Avg Qnty Code: 200-499
Maximum Amount Possessed During The Year Code: 10
Description Of The Max Qnty Code: 200-499
Applicable Unit Of Measure Code: 3
Description Of The Unit Of Measure: CUBIC FEET
Storage Container:
Type Code: L
Description: CYLINDER
Pressure of Hazardous Substance Code: 2
Temperature of The Hazardous Substance Code: 4
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 1001
Chemical Abstract Service Identifier Number: 74862
First Hazardous Classification Code For Chemical: 2.1
Hazard Classification 1 Of The Chemical: Flammable Gases
Second Hazardous Classification Code For Chemical: 6.3
Hazard Classification 2 Of The Chemical: Acute Health Hazard
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BP WEST COAST PRODUCTS (Continued)

1000327409

Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	No
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Sic Code:	4247 - PETROLEUM BULK STATIONS & TERMINALS
Emergency Contact:	STEVE NOLL
Emergency Procedure:	MAIN OFFICE
Chemical Trade Name:	ANSULITE FOAM
Most Hazardous:	DIETHYLENE GLYCOL MONOBUTYL ETHER
Manager Name:	STEVE NOLL
Mailing Address:	PO BOX 83409 LINTON STATION PORTLAND, OR 97283
Mailing County:	MULTNOMAH
Day Phone:	5032868257
Employee File #:	015123
No. of Employees:	32
Placard:	Yes
Business Type:	PETROLIUM PRODUCT DISTRIBUTION
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032868257
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	BP WEST COAST PRODUCTS CO
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	20
Description Of The Avg Qnty Code:	1,000-4,999
Maximum Amount Possessed During The Year Code:	20
Description Of The Max Qnty Code:	1,000-4,999
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	E
Description:	PLASTIC OR NON-METALLIC DRUM
Pressure of Hazardous Substance Code:	1
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	Not reported
Chemical Abstract Service Identifier Number:	112345
First Hazardous Classification Code For Chemical:	6.3
Hazard Classification 1 Of The Chemical:	Acute Health Hazard
Second Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 2 Of The Chemical:	Not reported
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Mixture
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	No
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Sic Code:	4247 - PETROLEUM BULK STATIONS & TERMINALS

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BP WEST COAST PRODUCTS (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000327409

Emergency Contact:	STEVE NOLL
Emergency Procedure:	MAIN OFFICE
Chemical Trade Name:	DIESEL
Most Hazardous:	PETROLEUM DISTILLATES
Manager Name:	STEVE NOLL
Mailing Address:	PO BOX 83409 LINTON STATION PORTLAND, OR 97283
Mailing County:	MULTNOMAH
Day Phone:	5032868257
Employee File #:	015123
No. of Employees:	32
Placard:	Yes
Business Type:	PETROLIUM PRODUCT DISTRIBUTION
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032868257
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	BP WEST COAST PRODUCTS CO
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	51
Description Of The Avg Qnty Code:	2,500,000-4,999,999
Maximum Amount Possessed During The Year Code:	53
Description Of The Max Qnty Code:	7,500,000-9,999,999
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	A
Description:	ABOVEGROUND TANK
Pressure of Hazardous Substance Code:	1
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1202
Chemical Abstract Service Identifier Number:	68476346
First Hazardous Classification Code For Chemical:	3.3
Hazard Classification 1 Of The Chemical:	Flammable Liq. (73F<FP<141F)
Second Hazardous Classification Code For Chemical:	6.3
Hazard Classification 2 Of The Chemical:	Acute Health Hazard
Third Hazardous Classification Code For Chemical:	6.4
Hazard Classification 3 Of The Chemical:	Chronic Health Hazard
Is Substance Pure Or Mixture:	Mixture
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	No
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Sic Code:	4247 - PETROLEUM BULK STATIONS & TERMINALS
Emergency Contact:	STEVE NOLL
Emergency Procedure:	MAIN OFFICE
Chemical Trade Name:	ETHANOL
Most Hazardous:	ETHANOL
Manager Name:	STEVE NOLL

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

Mailing Address: PO BOX 83409 LINTON STATION
PORTLAND, OR 97283
Mailing County: MULTNOMAH
Day Phone: 5032868257
Employee File #: 015123
No. of Employees: 32
Placard: Yes
Business Type: PETROLIUM PRODUCT DISTRIBUTION
Sprinkler System: Yes
Date Form Completed: Not reported
Business Phone: 5032868257
Department Or Division Of Company: Not reported
Facility Has Written Emergency Plan: Yes
Company Name: BP WEST COAST PRODUCTS CO
Fire Dept Code: 0291
Physical State : Not reported
Physical State Of The Substance: LIQUID
Average Amount Possessed During The Year Code: 42
Description Of The Avg Qnty Code: 500,000-749,999
Maximum Amount Possessed During The Year Code: 50
Description Of The Max Qnty Code: 1,000,000-2,499,999
Applicable Unit Of Measure Code: 2
Description Of The Unit Of Measure: GALLONS
Storage Container:
Type Code: A
Description: ABOVEGROUND TANK
Pressure of Hazardous Substance Code: 1
Temperature of The Hazardous Substance Code: 4
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 1170
Chemical Abstract Service Identifier Number: 64175
First Hazardous Classification Code For Chemical: 3.2
Hazard Classification 1 Of The Chemical: Flammable Liq.(0F<FP<73F)
Second Hazardous Classification Code For Chemical: 6.3
Hazard Classification 2 Of The Chemical: Acute Health Hazard
Third Hazardous Classification Code For Chemical: 6.4
Hazard Classification 3 Of The Chemical: Chronic Health Hazard
Is Substance Pure Or Mixture: Mixture
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): No
Does The Chemical Contain A 112r Chemical: No
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Sic Code: 4247 - PETROLEUM BULK STATIONS & TERMINALS

Emergency Contact: STEVE NOLL
Emergency Procedure: MAIN OFFICE
Chemical Trade Name: GASOLINE
Most Hazardous: PETROLEUM DISTILLATES
Manager Name: STEVE NOLL
Mailing Address: PO BOX 83409 LINTON STATION
PORTLAND, OR 97283
Mailing County: MULTNOMAH
Day Phone: 5032868257
Employee File #: 015123
No. of Employees: 32

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

Placard:	Yes
Business Type:	PETROLIUM PRODUCT DISTRIBUTION
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032868257
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	BP WEST COAST PRODUCTS CO
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	51
Description Of The Avg Qnty Code:	2,500,000-4,999,999
Maximum Amount Possessed During The Year Code:	53
Description Of The Max Qnty Code:	7,500,000-9,999,999
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	A
Description:	ABOVEGROUND TANK
Pressure of Hazardous Substance Code:	1
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1203
Chemical Abstract Service Identifier Number:	8006619
First Hazardous Classification Code For Chemical:	3.1
Hazard Classification 1 Of The Chemical:	Flammable Liq.(FP<0F)
Second Hazardous Classification Code For Chemical:	6.3
Hazard Classification 2 Of The Chemical:	Acute Health Hazard
Third Hazardous Classification Code For Chemical:	6.4
Hazard Classification 3 Of The Chemical:	Chronic Health Hazard
Is Substance Pure Or Mixture:	Mixture
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	No
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Sic Code:	4247 - PETROLEUM BULK STATIONS & TERMINALS

[Click this hyperlink](#) while viewing on your computer to access
4 additional OR HSIS record(s) in the EDR Site Report.

AST:

Employer File Number: 015123
Hazardous Substance: GASOLINE ADDITIVES
Reporting Quantities: 100,000-249,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015123
Hazardous Substance: GASOLINE
Reporting Quantities: 7,500,000-9,999,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015123
Hazardous Substance: ETHANOL

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BP WEST COAST PRODUCTS (Continued)

1000327409

Reporting Quantities: 1,000,000-2,499,999
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 015123
Hazardous Substance: DIESEL
Reporting Quantities: 7,500,000-9,999,999
Quantity Units: GALLONS
Physical State: LIQUID

16
NNE
1/2-1
3208 ft.

BOYDSTUN METAL WORKS INC
9002 N SEVER CT
PORTLAND, OR 97203

RCRIS-SQG 1001120179
SHWS - ECSI ORQ000003376
FINDS
HSIS
AST
FTTS INSP
OR VCS

Relative:
Higher

Actual:
65 ft.

FTTS:

Case Number: Not reported
Docket Number: EPCRA-10-01-060
Complaint Issued: 01/25/2002
Complaint Closed: Not reported
Abatement Amount: 0
Proposed Penalty: 55830
Final Assessment: 10000
Final Order Date: 02/19/2002
Close Date: Not reported
Violation: EPCRA, Nonreporting/Failure to RPT to EPA

RCRIS:

Owner: BOYDSTUN METAL WORKS, INC.
(503) 285-3515
EPA ID: ORQ000003376
Contact: JIM CAREY
(503) 285-3515

Classification: Conditionally Exempt Small Quantity Generator
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: Not reported
Area of Violation: TSD-TANKS REQUIREMENTS
Date Violation Determined: 06/05/1996
Actual Date Achieved Compliance: 01/21/1997

Regulation Violated: Not reported
Area of Violation: GENERATOR-OTHER REQUIREMENTS
Date Violation Determined: 06/05/1996
Actual Date Achieved Compliance: 07/12/1996

Regulation Violated: Not reported
Area of Violation: GENERATOR-OTHER REQUIREMENTS
Date Violation Determined: 06/05/1996
Actual Date Achieved Compliance: 01/21/1997

Regulation Violated: Not reported
Area of Violation: TSD-CONTINGENCY PLAN REQUIREMENTS
Date Violation Determined: 06/05/1996
Actual Date Achieved Compliance: 01/21/1997

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BOYDSTUN METAL WORKS INC (Continued)

1001120179

Regulation Violated:	Not reported
Area of Violation:	TSD-CONTAINERS REQUIREMENTS
Date Violation Determined:	06/05/1996
Actual Date Achieved Compliance:	01/21/1997
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-MANIFEST REQUIREMENTS
Date Violation Determined:	06/05/1996
Actual Date Achieved Compliance:	01/21/1997
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-LAND BAN REQUIREMENTS
Date Violation Determined:	06/05/1996
Actual Date Achieved Compliance:	01/21/1997
Regulation Violated:	Not reported
Area of Violation:	TSD-CONTAINERS REQUIREMENTS
Date Violation Determined:	06/05/1996
Actual Date Achieved Compliance:	01/21/1997

Penalty Summary:

Penalty Description	Penalty Date	Penalty Amount	Lead Agency
Final Monetary Penalty	1/21/1997	3000	STATE
Proposed Monetary Penalty	7/29/1996	3000	STATE

There are 8 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
------------	-------------------	--------------------

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Integrated Compliance Information
National Compliance Data Base
Oregon Department of Environmental Quality
Resource Conservation and Recovery Act Information system
Toxics Release Inventory

ECSI:

State ID Number: 2362	Brown ID	0
Study Area: False	Coordinator Supplier:	GWISTAR
Cerclis ID: Not reported	Tax Lots:	Parcel 2, of lot 1
Size: approx. 7 acres	NPL:	False
Orphan: False	Region ID:	2
Lat/Long: 45.6091 / -122.769	Tax Lots:	Parcel 2, of lot 1
Township Coord.: 2.00	Township Zone:	N
Range Coord.: 1.00	Range Zone:	W
Section Coord.: 35	Qtr Section:	Not reported
Legislative : 35	Further Action:	256
FACA ID : 10005	Score Value:	87
Update Date : 2003-11-26 14:03:29.	Created Date:	jmw
Created Time : 1999-06-04 00:00:00		

HAZ RELEASED:

Quant. Released:	Not reported
Date:	Not reported
Update Date:	Not reported
Update By:	Not reported
Substance ID :	Not reported
Code :	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BOYDSTUN METAL WORKS INC (Continued)

1001120179

Substance Name : Not reported
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : Not reported
Feature Id : Not reported
Hazard Release Id : Not reported
Medium Code Id : Not reported
Substance Id : Not reported
Unit Code : Not reported
Observation : Not reported
Owner Operator : Not reported
Lab Data : Not reported
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : Not reported
Last Updated On : Not reported
Sample Comment : Not reported

Alias Name: Schnitzer Investment Corp (Property Owner)
See Schnitzer Steel ECSI #2355
Investigation Status: 208

NARR:

NARR ID: 5738367
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments Weston sampling results from the Portland Harbor Sediment Study revealed total organotins, copper, zinc, and antimony in river sediments adjacent to the site. Results from a 1998 on-site investigation show that groundwater is contaminated with chlorinated solvents, and soil contains metals, PCBs, and petroleum compounds. Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for US EPA, 5/98. Total organotins, copper, zinc, antimony in Willamette River sediments; PCBs, chlorinated solvents, metals, and petroleum on-site. (6/4/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Boydstun Metal Works facility has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 2, 1999. Response from Boydstun Metal Works was received on April 5, 1999. A site screening is scheduled (level II priority). (2/1/00 JMW/SAP) Site information combined with Schnitzer Steel Strategy Recommendation. See ECSI 2355.

NARR ID: 5738368
NARR Code : Data Sources
Created By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

BOYDSTUN METAL WORKS INC (Continued)

1001120179

Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738369
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738370
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133564
Site Name: Boydstun Metal Works Inc
County Code : 26.00
Owner Name: Boysdtun Metal Works Inc
Owner Address: 9002 N Sever Ct
Portland, 97203
Lat/Long 45.6091 / -122.7697
Owner Code: SUS

FACA Id : 10005

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 705444
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 738
Comments : Combined with Schnitzer Steel - see ECSI 2355.

Action ID: 9484
Start Date: 2000-03-02 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-01-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707069
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 313
Comments : Not reported

Action ID: 9424
Start Date: 1999-06-04 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1999-06-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707070
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported

Action ID: 9508
Start Date: 1999-06-04 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-02-01 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BOYDSTUN METAL WORKS INC (Continued)

1001120179

Employee Id: 349
Comments : Combined with Schnitzer Steel Strategy Recommendation SEE ECSI 2355.

DISPOSAL:

Disposal ID:	Not reported	Feature ID:	Not reported
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		

FEATURE:

Feature Id :	Not reported
Site Id :	Not reported
Feature Code :	Not reported
Relative Position :	Not reported
Hazard Rel Id :	Not reported
Region Code :	Not reported
Lat Long Method :	Not reported
Lat Long Source :	Not reported
County Code :	Not reported
Refrence Id :	Not reported
Twtnshp Coord :	Not reported
Township Zone :	Not reported
Range Coord :	Not reported
Range Zone :	Not reported
Section Coord :	Not reported
Qtr Section Coord :	Not reported
Address :	Not reported
Zip Plus :	Not reported
Lat/Long :	Not reported
Lat/Lon Decimal :	Not reported
Feature Size :	Not reported
Est Accuracy :	Not reported
Created On Date :	Not reported
Created By Prgm :	Not reported
Last Updated By :	Not reported
Last Updated On :	Not reported
Comment :	Not reported

WELL:

Well ID:	Not reported
Water Resource Code:	Not reported
Effective Date:	Not reported
Aquifer Code:	Not reported
Ground Station Key:	Not reported

OPERATIONS:

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BOYDSTUN METAL WORKS INC (Continued)

Database(s)
EDR ID Number
EPA ID Number

1001120179

Operation Id : 133564
Operation Status : Active
Common Name : Boysdtun Metal Works Inc
Yrs of Operation : February 1990 - Current
Comments : February 1990 - Current
Updated By : jmw
Updated Date : 1999-06-04 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196794
SIC Code: 3499
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 2362
Action: RI
Start Date: 03/02/20
End Date: Not reported
Program: VCS
CRL: SUS
Facility Size: approx. 7 acres
Project Manager Last Name: Voss
Project Manager First Name: Alicia

HSIS:

Emergency Contact:
Emergency Procedure: REPAIR OFFICE LUNCHRM
Chemical Trade Name:
Most Hazardous:
Manager Name:
Mailing Address:

MIKE COVER

Mailing County:
Day Phone:
Employee File #:
No. of Employees:
Placard:
Business Type:
Sprinkler System:
Date Form Completed:
Business Phone:
Department Or Division Of Company:
Facility Has Written Emergency Plan:
Company Name:
Fire Dept Code:
Physical State :
Physical State Of The Substance:
Average Amount Possessed During The Year Code:
Description Of The Avg Qnty Code:
Maximum Amount Possessed During The Year Code:
Description Of The Max Qnty Code:
Applicable Unit Of Measure Code:
Description Of The Unit Of Measure:
Storage Container:

ACETYLENE
ACETYLENE
DOUG PONTIFEX
9002 N SEVER CT
PORTLAND, OR 97203
MULTNOMAH
5032853515
050578
15
Yes
REPAIR SHOP
Yes
Not reported
5032853515
Not reported
Yes
BOYDSTUN METAL WORKS INC
0291
Not reported
GAS
11
500-999
20
1,000-4,999
3
CUBIC FEET

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BOYDSTUN METAL WORKS INC (Continued)

1001120179

Type Code:	L
Description:	CYLINDER
Pressure of Hazardous Substance Code:	2
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1001
Chemical Abstract Service Identifier Number:	74862
First Hazardous Classification Code For Chemical:	2.1
Hazard Classification 1 Of The Chemical:	Flammable Gases
Second Hazardous Classification Code For Chemical:	6.3
Hazard Classification 2 Of The Chemical:	Acute Health Hazard
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Pure
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	No
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Sic Code:	3362 - TRUCK TRAILER MFG
Emergency Contact:	MIKE COVER
Emergency Procedure:	REPAIR OFFICE LUNCHRM
Chemical Trade Name:	ARGON
Most Hazardous:	ARGON
Manager Name:	DOUG PONTIFEX
Mailing Address:	9002 N SEVER CT PORTLAND, OR 97203
Mailing County:	MULTNOMAH
Day Phone:	5032853515
Employee File #:	050578
No. of Employees:	15
Placard:	Yes
Business Type:	REPAIR SHOP
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032853515
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	BOYDSTUN METAL WORKS INC
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	GAS
Average Amount Possessed During The Year Code:	11
Description Of The Avg Qnty Code:	500-999
Maximum Amount Possessed During The Year Code:	20
Description Of The Max Qnty Code:	1,000-4,999
Applicable Unit Of Measure Code:	3
Description Of The Unit Of Measure:	CUBIC FEET
Storage Container:	
Type Code:	L
Description:	CYLINDER
Pressure of Hazardous Substance Code:	2
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BOYDSTUN METAL WORKS INC (Continued)

1001120179

United Nations/north America 4 Digit Classification Number: 1006
Chemical Abstract Service Identifier Number: 7440371
First Hazardous Classification Code For Chemical: 2.2
Hazard Classification 1 Of The Chemical: NonFlammable Gases
Second Hazardous Classification Code For Chemical: Not reported
Hazard Classification 2 Of The Chemical: Not reported
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): No
Does The Chemical Contain A 112r Chemical: No
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Sic Code: 3362 - TRUCK TRAILER MFG

Emergency Contact: MIKE COVER
Emergency Procedure: REPAIR OFFICE LUNCHRM
Chemical Trade Name: ARGON LIQUID
Most Hazardous: ARGON
Manager Name: DOUG PONTIFEX
Mailing Address: 9002 N SEVER CT
PORTLAND, OR 97203
MULTNOMAH
5032853515
050578
15
Yes
REPAIR SHOP
Yes
Not reported
5032853515
Not reported
Yes
BOYDSTUN METAL WORKS INC
0291
Not reported
LIQUID
04
50-199
10
200-499
2
GALLONS

Storage Container:
Type Code: S
Description: DEWAR
Pressure of Hazardous Substance Code: 2
Temperature of The Hazardous Substance Code: 7
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 1951
Chemical Abstract Service Identifier Number: 7440371
First Hazardous Classification Code For Chemical: 2.2
Hazard Classification 1 Of The Chemical: NonFlammable Gases
Second Hazardous Classification Code For Chemical: 6.3
Hazard Classification 2 Of The Chemical: Acute Health Hazard

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BOYDSTUN METAL WORKS INC (Continued)

1001120179

Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Pure
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Sic Code: 3362 - TRUCK TRAILER MFG	
Emergency Contact:	MIKE COVER
Emergency Procedure: REPAIR OFFICE LUNCHRM	
Chemical Trade Name:	BLUE SHIELD
Most Hazardous:	ARGON
Manager Name:	DOUG PONTIFEX
Mailing Address:	9002 N SEVER CT PORTLAND, OR 97203
Mailing County:	MULTNOMAH
Day Phone:	5032853515
Employee File #:	050578
No. of Employees:	15
Placard:	Yes
Business Type:	REPAIR SHOP
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032853515
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	BOYDSTUN METAL WORKS INC
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	GAS
Average Amount Possessed During The Year Code:	20
Description Of The Avg Qnty Code:	1,000-4,999
Maximum Amount Possessed During The Year Code:	20
Description Of The Max Qnty Code:	1,000-4,999
Applicable Unit Of Measure Code:	3
Description Of The Unit Of Measure:	CUBIC FEET
Storage Container:	
Type Code:	L
Description:	CYLINDER
Pressure of Hazardous Substance Code:	2
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1956
Chemical Abstract Service Identifier Number:	7440371
First Hazardous Classification Code For Chemical:	2.2
Hazard Classification 1 Of The Chemical:	NonFlammable Gases
Second Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 2 Of The Chemical:	Not reported
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Mixture
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BOYDSTUN METAL WORKS INC (Continued)

1001120179

Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Sic Code: 3362 - TRUCK TRAILER MFG	
Emergency Contact:	MIKE COVER
Emergency Procedure: REPAIR OFFICE LUNCHRM	
Chemical Trade Name:	DTE 11M 0-1
Most Hazardous:	PETROLEUM HYDROCARBONS
Manager Name:	DOUG PONTIFEX
Mailing Address:	9002 N SEVER CT PORTLAND, OR 97203
Mailing County:	MULTNOMAH
Day Phone:	5032853515
Employee File #:	050578
No. of Employees:	15
Placard:	Yes
Business Type:	REPAIR SHOP
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032853515
Department Or Division Of Company:	Not reported
Facility Has Written Emergency Plan:	Yes
Company Name:	BOYDSTUN METAL WORKS INC
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	10
Description Of The Avg Qnty Code:	200-499
Maximum Amount Possessed During The Year Code:	10
Description Of The Max Qnty Code:	200-499
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	A
Description:	ABOVEGROUND TANK
Pressure of Hazardous Substance Code:	1
Temperature Of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1270
Chemical Abstract Service Identifier Number:	64742547
First Hazardous Classification Code For Chemical:	4.5
Hazard Classification 1 Of The Chemical:	Combustible Materials
Second Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 2 Of The Chemical:	Not reported
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Pure
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	No
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Sic Code: 3362 - TRUCK TRAILER MFG	

[Click this hyperlink](#) while viewing on your computer to access
5 additional OR HSIS record(s) in the EDR Site Report.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

BOYDSTUN METAL WORKS INC (Continued)

1001120179

AST:

Employer File Number: 050578
Hazardous Substance: DTE 11M 0-1
Reporting Quantities: 200-499
Quantity Units: GALLONS
Physical State: LIQUID

Employer File Number: 050578
Hazardous Substance: USED OIL
Reporting Quantities: 200-499
Quantity Units: GALLONS
Physical State: LIQUID

E17
SSW
1/2-1
3497 ft.

OLYMPIC PIPE LINE PORTLAND DELIVERY FACI
9420 NW ST HELENS RD
PORTLAND, OR 97231

OR CRL S105540389
N/A

Site 1 of 3 in cluster E

Relative:
Higher

OR CRL:

Facility ID: 3342
Location ID: 442
Status Code: LIS
Facility Status: SITE INVESTIGATION
Lat/Long: 45.591 / -122.777

Actual:
37 ft.

E18
SSW
1/2-1
3497 ft.

MOBIL OIL TERMINAL
9420 NW ST. HELENS RD
PORTLAND, OR 97231

SHWS - ECSI S104186397
OR VCS N/A

Site 2 of 3 in cluster E

Relative:
Higher

ECSI:

State ID Number: 137
Study Area: False
Cercles ID: Not reported
Size: 24.23 acres
Orphan: False
Lat/Long: 45.5924 / -122.778
Township Coord.: 1.00
Range Coord.: 1.00
Section Coord.: 11
Legislative : 11
FACA ID : 47517
Update Date : 2003-08-06 12:20:58.
Created Time : 1988-08-05 00:00:00

Brown ID 0
Coordinator Supplier: BBRODY
Tax Lots: 25
NPL: False
Region ID: 2
Tax Lots: 25
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 0
Score Value: 0
Created Date: CONV

Actual:
37 ft.

HAZ RELEASED:

Quant. Released: 46,116 gals
Date: 3/10/85
Update Date: 1988-05-08 00:00:00
Update By: Not reported
Substance ID : 121982
Code : ECD169
Substance Name : DIESEL - FUEL OIL
Substance Abbrev. : Not reported
Substance Categ ID : 8529
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

MOBIL OIL TERMINAL (Continued)

S104186397

Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 344368
Feature Id : Not reported
Hazard Release Id : 382828
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : False
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : Not reported
Sampling Result ID : 345989
Feature Id : Not reported
Hazard Release Id : 382828
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : False
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : CONV
Last Updated On : 1994-09-13 00:00:00
Sample Comment : Not reported

Alias Name: ExxonMobil Bulk Plant
ExxonMobil Terminal
Mobil Oil Bulk Plant - St. Helens RD
SEE ALSO Olympic Pipe Line (ECSI #3342)
Shore Terminals
ST Services

Investigation Status: 207

NARR:

NARR ID: 5729912
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR Comments (7/18/97 MAF/VCS) The facility has been used for bulk storage and dispensing of fuel oils, gasolines, and diesel fuels since 1928. Prior to 1970, petroleum sludges from above-ground storage tanks were discharged onto the ground during

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

MOBIL OIL TERMINAL (Continued)

S104186397

periodic tank cleanings. In the late 1960s, petroleum sheens began to appear on the surface of the Willamette River adjacent to the site. Mobil has tried to control the release by constructing a slurry wall along the riverbank. In March 1985, 46,116 gallons of petroleum were spilled at the site. All but 11,004 gallons were recovered. Mobil entered DEQ's Voluntary Cleanup program in January 1992. NWR file on spill incident. Soil Gas Survey Target Environmental Services, March 1990 Environmental Site Assessment Report Kleinfelder May 1990. Addendum to the Environmental Site Assessment Report Kleinfelder September 1990. Lube Oil Blending Plant - Environmental Site Assessment Report Kleinfelder. November 1990 Lube Oil Blending Plant Interceptor Drain Construction WP Kleinfelder. December 1990 Draft Conceptual Site Model Kleinfelder April 1991. Interim Data Summary Report Kleinfelder August 1991. Ecological Risk Assessment Report Kleinfelder September 1991 Human Health and Ecological Risk Assessment Kleinfelder December 1991 Addendum Site Assessment Report II Kleinfelder May 1993. Feasibility Study (FS) Kleinfelder November 1996. Deep Aquifer Characterization, Kleinfelder, January 20, 1998. 1997 Groundwater Monitoring Report February 1998 SVE and Air Sampling Pilot Study, Kleinfelder, January 15, 1999. 1998 Groundwater Monitoring Report, January 1999 1999 Groundwater Monitoring Report, November 1999 Remedial System Installation, Kleinfelder, August 23, 2000. Remediation Status Report (July Aug 2000), Sept 2000 2000 Groundwater Monitoring Report (November), June 2001 Remediation Status Report (Sept 2000 June 2001), October 2001 2001 Groundwater Monitoring Report (November), March 2002 Annual Remediation Status Report (July 2000 October 2001), Kleinfelder, March 2002. Installation of Background Wells, March 2002 Focused Feasibility Study (Draft) May 2002 Storm Sewer IRAM (Oct 2002), April 2003 2002 Groundwater Monitoring Report (November), June 2003 Annual Remediation Status Report (Nov 2001-Dec 2002) , June 2003 petroleum Periodic discharging of petroleum sludges to ground from 1928 to 1970. Spill on March 10, 1985; possibly other spills. (7/18/97 MAF/VCS) The Mobil Oil Corporation has completed a Remedial Investigation, Risk Assessment, and Feasibility Study at the site, documenting extensive soil and groundwater contamination, primarily in the northeast section of the site. In April 1997, DEQ proposed a remedial action to address the contamination. The remedy included free-product recovery, soil vapor extraction, air sparging, and institutional controls to restrict land use and public access to the site. After seeking public comments on the proposal, the remedy was approved in a Record of Decision (ROD) in June 1997. (8/27/98 MJM/VCP) Negotiations for a Remedial Design/Remedial Action Agreement have been initiated. Mobil performed (Sept. 97) groundwater testing of the deep aquifer as required in the ROD. A soil vapor extraction and air sparging system for Phase I has been constructed, and system start-up was initiated in November 1999. (1/19/01 MJM/VCP) Mobil is currently evaluating options to prevent or limit the discharge of contaminated groundwater to the Willamette River while upland source-removal measures progress. (5/22/02 BBH/VCP) The Olympic Pipe Line

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOBIL OIL TERMINAL (Continued)

S104186397

Portland Delivery Facility is located within the Terminal. Olympic has been operating this facility since the mid 1960s. In 2001, Olympic completed an Expanded PA (XPA) that identified petroleum contamination at its facility. Refer to ECSI file #3342 for additional details. (12/6/02 BBH/VCP) MOT abandoned an old wooden city outfall located at the south end of the dock. The remediation system is continuing operation. Groundwater contaminated above federal drinking water standards and above ambient water quality criteria is discharging directly to the Willamette River.

NARR ID: 5730077
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: BBRODY
Updated Date: 2003-08-06 12:20:11
NARR ID: 5730221
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730222
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730223
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730224
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 131543
Site Name: Mobil Oil Terminal
County Code : 26.00
Owner Name: Mobil Oil Terminal
Owner Address: 9420 NW St. Helens RD
Portland, 97231
Lat/Long 45.5924 / -122.7780
Owner Code: LIS

FACA Id : 47517

SITE CONTROL:

Site Control Sequence # : 202
Site Id : 137
Control Sequence Number : 4
Begin Date : 2002-06-22 00:00:00
End Date : Not reported
Frequency Of Review : 60
Last Reviewed By : Bruce Brody-Heine

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MOBIL OIL TERMINAL (Continued)

S104186397

Last Reviewed Date : Not reported
Last Updated By : BBRODY
Last Updated Date : 2003-08-06 10:02:08
Site Comments : Eliminates current and future potential use of onsite groundwater for consumption or other beneficial uses (not applicable to remediation efforts). Applies to both ExxonMobil and ST Services Portions of site (i.e., the entire site)

Site Control Sequence # : 203
Site Id : 137
Control Sequence Number : 5
Begin Date : 2002-06-22 00:00:00
End Date : Not reported
Frequency Of Review : 60
Last Reviewed By : Bruce Brody-Heine
Last Reviewed Date : Not reported
Last Updated By : BBRODY
Last Updated Date : 2003-08-06 10:02:03
Site Comments : Use of property limited to industrial use only. Applies to both ExxonMobil and ST Services Portions of site (i.e., the entire site)

Site Control Sequence # : 204
Site Id : 137
Control Sequence Number : 29
Begin Date : 2002-06-22 00:00:00
End Date : Not reported
Frequency Of Review : 60
Last Reviewed By : Bruce Brody-Heine
Last Reviewed Date : Not reported
Last Updated By : BBRODY
Last Updated Date : 2003-08-06 10:01:52
Site Comments : Maintain existing site security (i.e., fencing and restricted access) to prevent public access. Applies to both ExxonMobil and ST Services Portions of site (i.e., the entire site)

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 714882 Action ID: 9498
Agency ID : Dept Of Environmental Quality Start Date: 1996-03-28 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 1996-03-28 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 767
Comments : Not reported

Admin ID: 710485 Action ID: 9459
Agency ID : Dept Of Environmental Quality Start Date: 1997-03-31 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: jmd Update Date: 1997-10-14 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 518
Comments : RI report considered PAE.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MOBIL OIL TERMINAL (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104186397

Admin ID: 710512
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 767
Comments : Not reported

Action ID: 9426
Start Date: 1994-12-14 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-10-15 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710513
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 767
Comments : Not reported

Action ID: 9437
Start Date: 1996-03-27 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-10-15 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710660
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: sag
Created By: Not reported
Employee Id: 518
Comments : Not reported

Action ID: 9473
Start Date: 1997-10-01 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1999-07-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 715761
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 344
Comments : LUST RI, administratively closed in LUST; release unrelated to USTs. (LUST log #26-90-0283)

Action ID: 9477
Start Date: 1991-03-13 00:00:00
Region ID: Headquarters
Substance Code: LUS
Cleanup Flag: False
Update Date: 1999-04-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 721701
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 293
Comments : Not reported

Action ID: 9508
Start Date: 1994-01-13 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-02-19 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 700425
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0

Action ID: 9425
Start Date: 1991-03-01 00:00:00
Region ID: Headquarters
Substance Code: VCS
Cleanup Flag: False

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOBIL OIL TERMINAL (Continued)

S104186397

Updated By: kpd
Created By: Not reported
Employee Id: 344
Comments : Not reported

Update Date: 1997-10-15 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711211
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmd
Created By: Not reported
Employee Id: 518
Comments : Not reported

Action ID: 9440
Start Date: 1991-02-01 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-12-18 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711778
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 344
Comments : Not reported

Action ID: 9465
Start Date: 1997-03-18 00:00:00
Region ID: Headquarters
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-07-23 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711779
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 344
Comments : Not reported

Action ID: 9467
Start Date: 1997-03-18 00:00:00
Region ID: Headquarters
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-07-23 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711859
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 344
Comments : Not reported

Action ID: 9442
Start Date: 1991-03-01 00:00:00
Region ID: Headquarters
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-07-23 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 701295
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2362
Comments : Formal RD/RA Voluntary Agreement.

Action ID: 9440
Start Date: 2002-05-08 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2002-12-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707210
Agency ID : Dept Of Environmental Quality

Action ID: 9469
Start Date: 1999-06-01 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

MOBIL OIL TERMINAL (Continued)

S104186397

Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2362
Comments : Not reported

Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2002-12-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712366
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9438
Start Date: 1997-07-18 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-07-18 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712367
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9439
Start Date: 1997-07-18 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-07-18 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712382
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 344
Comments : Not reported

Action ID: 9448
Start Date: 1997-07-14 00:00:00
Region ID: Headquarters
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-07-23 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712383
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 344
Comments : Not reported

Action ID: 9488
Start Date: 1997-07-15 00:00:00
Region ID: Headquarters
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-07-23 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712384
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 344
Comments : Not reported

Action ID: 9489
Start Date: 1997-07-15 00:00:00
Region ID: Headquarters
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-07-23 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

MOBIL OIL TERMINAL (Continued)

S104186397

Admin ID:	712385	Action ID:	9484
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-01-01 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	True
Updated By:	kpd	Update Date:	1997-07-23 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	344		
Comments :	Not reported		

Admin ID:	712386	Action ID:	9486
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-01-01 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-07-23 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	344		
Comments :	Not reported		

Admin ID:	712387	Action ID:	9429
Agency ID :	Dept Of Environmental Quality	Start Date:	1992-01-01 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-07-23 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	344		
Comments :	Not reported		

Admin ID:	712388	Action ID:	9494
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-04-01 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-07-23 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	344		
Comments :	Not reported		

Admin ID:	712461	Action ID:	9499
Agency ID :	Dept Of Environmental Quality	Start Date:	1996-03-29 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	gmw	Update Date:	1996-03-29 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		

Admin ID:	718181	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1988-08-05 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-02-19 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOBIL OIL TERMINAL (Continued)

S104186397

Created By: Not reported
Employee Id: 26
Comments : Not reported

Create Date: 2002-12-17 08:50:22.

Admin ID: 724068
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9445
Start Date: 1988-11-30 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-02-19 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOBIL OIL TERMINAL (Continued)

S104186397

Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 131543
Operation Status :Active
Common Name : Mobil Oil Terminal
Yrs of Operation : since about 1928
Comments : since about 1928
Updated By : kpd
Updated Date : 1997-07-23 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:195607
SIC Code: 5171
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 137
Action: RA
Start Date: 06/01/19
End Date: Not reported
Program: VCS
CRL: LIS
Facility Size: 24.23 acres
Project Manager Last Name: Brody-Heine
Project Manager First Name: Bruce

E19
SSW
1/2-1
3497 ft.

MOBIL OIL TERMINAL
9420 NW ST. HELENS RD
PORTLAND, OR 97231

OR CRL S102615783
N/A

Site 3 of 3 in cluster E

Relative:
Higher

OR CRL:

Actual:
37 ft.

Facility ID: 137
Location ID: 47517
Status Code: LIS
Facility Status: REMEDIAL ACTION
Lat/Long: 45.5924 / -122.778

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

F20 UNION CARBIDE CORP.
NNE 11920 N BURGARD ST
1/2-1 PORTLAND, OR 97203
3882 ft.

SHWS - ECSI S103841500
OR CRL N/A

Site 1 of 3 in cluster F

Relative:
Higher

ECSI:

Actual:
75 ft.

State ID Number: 176
Study Area: False
Cerclis ID: 990823288
Size: 84 acres
Orphan: False
Lat/Long: 45.6105 / -122.763
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 35
Legislative: 35
FACA ID: 8883
Update Date: 2000-01-14 00:00:00
Created Time: 1988-04-25 00:00:00

Brown ID Not reported
Coordinator Supplier: jmw
Tax Lots: 13,3,1
NPL: False
Region ID: 2
Tax Lots: 13,3,1
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 256
Score Value: 89
Created Date: CONV

HAZ RELEASED:

Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID: 122000
Code: ECD239
Substance Name: PHENOLS
Substance Abbrev.: Not reported
Substance Categ ID: Not reported
Substance Sub Categ: Not reported
Category Level: Not reported
Created By: Not reported
Create Date: Not reported
Substance Alias ID: Not reported
Sub Alias Name: Not reported
Sampling Result ID: 341171
Feature Id: Not reported
Hazard Release Id: 381138
Medium Code Id: 703
Substance Id: Not reported
Unit Code: Not reported
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: 0- to 32 feet bgs
Start Date: 1982-06-30 00:00:00
End Date: Not reported
Minimum Concentration: Not reported
Max Concentration: Not reported
Last Update By: jmw
Last Updated On: 2000-04-18 00:00:00
Sample Comment: .35 - 14 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID: 121664
Code: 7440-38-2

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number
Database(s)

S103841500

Substance Name : ARSENIC
Substance Abbrev. : Not reported
Substance Categ ID : 8439
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319286
Sub Alias Name : AS
Sampling Result ID : 341172
Feature Id : 0
Hazard Release Id : 381139
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : SB-10, 15.5 Ft
Start Date : 2000-08-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:42:54.
Sample Comment : 1,260 mg/kg
Sampling Result ID : 341214
Feature Id : Not reported
Hazard Release Id : 381139
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 14.8 - 26.5 mg/kg
Sampling Result ID : 341262
Feature Id : 0
Hazard Release Id : 381139
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MW-5 (filtered)
Start Date : 2001-06-18 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:41:59.
Sample Comment : 14.2 mg/L
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-07-10 00:00:00
Update By: Not reported
Substance ID : 121668
Code : 7440-43-9
Substance Name : CADMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8460
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319291
Sub Alias Name : CD
Sampling Result ID : 341173
Feature Id : 0
Hazard Release Id : 381140
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : SB-10, 15.5 Ft
Start Date : 2000-08-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:53:03.
Sample Comment : 967 mg/kg
Sampling Result ID : 341215
Feature Id : Not reported
Hazard Release Id : 381140
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 3.6 - 10 mg/kg
Sampling Result ID : 341263
Feature Id : 0
Hazard Release Id : 381140
Medium Code Id : 698
Substance Id : 0

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103841500

Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 21- to 34 feet bgs
Start Date : 1993-04-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:52:12.
Sample Comment : 4.34 mg/L
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121639
Code : 7439-92-1
Substance Name : LEAD
Substance Abbrev. : Not reported
Substance Categ ID : 8466
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319256
Sub Alias Name : PB
Sampling Result ID : 341174
Feature Id : 0
Hazard Release Id : 381141
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : UCBH2A, 11.5 Ft
Start Date : 1982-06-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:08:36.
Sample Comment : 5770 mg/kg
Sampling Result ID : 341218
Feature Id : Not reported
Hazard Release Id : 381141
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .023 - .091 mg/kg
Sampling Result ID : 341264
Feature Id : Not reported
Hazard Release Id : 381141
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 19.5- to 35 feet bgs
Start Date : 1993-04-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .047 - 3.28 mg/L.
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121643
Code : 7439-97-6
Substance Name : MERCURY
Substance Abbrev. : Not reported
Substance Categ ID : 8467
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319260
Sub Alias Name : HG
Substance Alias ID : 319261
Sub Alias Name : HYDRARGYRUM
Substance Alias ID : 319262
Sub Alias Name : LIQUID SILVER
Substance Alias ID : 319263
Sub Alias Name : QUICKSILVER
Sampling Result ID : 341175
Feature Id : Not reported
Hazard Release Id : 381142
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 0- to 32 feet bgs
Start Date : 1982-06-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Last Updated On : 2000-04-18 00:00:00
Sample Comment : .8 - 6.7 mg/kg
Sampling Result ID : 341220
Feature Id : Not reported
Hazard Release Id : 381142
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .07 - 5.2 mg/kg
Sampling Result ID : 341265
Feature Id : Not reported
Hazard Release Id : 381142
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 21- to 34 feet bgs
Start Date : 1993-04-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .0067 mg/L
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121755
Code : 7782-49-2
Substance Name : SELENIUM
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319488
Sub Alias Name : SE
Sampling Result ID : 341176
Feature Id : Not reported
Hazard Release Id : 381143
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 0- to 32 feet bgs
Start Date : 1982-06-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 1.2-42.8 mg/kg
Sampling Result ID : 341228
Feature Id : Not reported
Hazard Release Id : 381143
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .1 - .6 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121642
Code : 7439-96-5
Substance Name : MANGANESE
Substance Abbrev. : Not reported
Substance Categ ID : 8468
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319259
Sub Alias Name : MN
Sampling Result ID : 341177
Feature Id : Not reported
Hazard Release Id : 381144
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 0- to 32 feet bgs
Start Date : 1982-06-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 375 - 32500 mg/kg
Sampling Result ID : 341219
Feature Id : Not reported
Hazard Release Id : 381144
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 353- 1640 mg/kg
Sampling Result ID : 341261
Feature Id : Not reported
Hazard Release Id : 381144
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 19.5- to 35 feet bgs
Start Date : 1993-04-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 2.82 - 283 mg/L
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121157
Code : 18540-29-9
Substance Name : CHROMIUM, HEXAVALENT
Substance Abbrev. : Not reported
Substance Categ ID : 8463
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317266
Sub Alias Name : CHROMIUM (+6)
Substance Alias ID : 317267
Sub Alias Name : CHROMIUM (VI)
Substance Alias ID : 317268
Sub Alias Name : CHROMIUM HEXAVALENT ION
Sampling Result ID : 341178

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Feature Id : Not reported
Hazard Release Id : 381145
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 0- to 32 feet bgs
Start Date : 1982-06-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 1.2-1.7 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-07-10 00:00:00
Update By: Not reported
Substance ID : 121671
Code : 7440-47-3
Substance Name : CHROMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8462
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318145
Sub Alias Name : CHROMIUM, INORGANIC
Substance Alias ID : 319294
Sub Alias Name : CHROMIUM, TOTAL
Sampling Result ID : 337567
Feature Id : Not reported
Hazard Release Id : 381146
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 19.5- to 35 feet bgs
Start Date : 1993-04-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .069 - .204 mg/L.
Sampling Result ID : 341179
Feature Id : 0
Hazard Release Id : 381146
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Owner Operator : False
Lab Data : True
Sample Depth : 1-5 Ft bgs
Start Date : 1994-01-03 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:56:06.
Sample Comment : 1,320 mg/kg
Sampling Result ID : 341216
Feature Id : Not reported
Hazard Release Id : 381146
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 20.6 - 32.2 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121662
Code : 7440-36-0
Substance Name : ANTIMONY
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319283
Sub Alias Name : SB
Substance Alias ID : 319284
Sub Alias Name : STIBIUM
Sampling Result ID : 341180
Feature Id : Not reported
Hazard Release Id : 381147
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 11.5 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 55.4 mg/kg
Sampling Result ID : 341227
Feature Id : Not reported
Hazard Release Id : 381147
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .3 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121673
Code : 7440-50-8
Substance Name : COPPER
Substance Abbrev. : Not reported
Substance Categ ID : 8464
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319296
Sub Alias Name : CU
Sampling Result ID : 341181
Feature Id : 0
Hazard Release Id : 381148
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : UCBH2A, 11.5 Ft
Start Date : 1989-01-02 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:57:34.
Sample Comment : 811 mg/kg
Sampling Result ID : 341217
Feature Id : Not reported
Hazard Release Id : 381148
Medium Code Id : 701

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number
Database(s)

S103841500

Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 18.6 - 138 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121646
Code : 7440-02-0
Substance Name : NICKEL
Substance Abbrev. : Not reported
Substance Categ ID : 8469
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319266
Sub Alias Name : NI
Sampling Result ID : 341182
Feature Id : Not reported
Hazard Release Id : 381149
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 21.5 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 8.1 - 90.8 mg/kg
Sampling Result ID : 341221
Feature Id : Not reported
Hazard Release Id : 381149
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 10.9 - 22 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121657
Code : 7440-28-0
Substance Name : THALLIUM
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319278
Sub Alias Name : TL
Sampling Result ID : 341183
Feature Id : Not reported
Hazard Release Id : 381150
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 21.5 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 1.8 - 105 mg/kg
Sampling Result ID : 341229
Feature Id : Not reported
Hazard Release Id : 381150
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .2 - .3 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 2000-04-18 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Update By: Not reported
Substance ID : 121679
Code : 7440-66-6
Substance Name : ZINC
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319302
Sub Alias Name : ZN
Sampling Result ID : 341184
Feature Id : 0
Hazard Release Id : 381151
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : SB-10, 15.5 Ft
Start Date : 2000-08-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:14:16.
Sample Comment : 32,300 mg/kg
Sampling Result ID : 341222
Feature Id : Not reported
Hazard Release Id : 381151
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 77 - 1250 mg/kg
Sampling Result ID : 341266
Feature Id : Not reported
Hazard Release Id : 381151
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 19.5- to 35 feet bgs
Start Date : 1993-04-20 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-14 00:00:00
Sample Comment : .305 - 23.6 mg/L As total zinc. Dissolved zinc of 0.01- to 0.013 mg/l.
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121694
Code : 75-09-2
Substance Name : METHYLENE CHLORIDE
Substance Abbrev. : Not reported
Substance Categ ID : 8518
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319341
Sub Alias Name : DICHLOROMETHANE
Substance Alias ID : 319342
Sub Alias Name : METHANE DICHLORIDE
Substance Alias ID : 319343
Sub Alias Name : METHYLENE BICHLORIDE
Substance Alias ID : 319344
Sub Alias Name : METHYLENE DICHLORIDE
Sampling Result ID : 341185
Feature Id : Not reported
Hazard Release Id : 381152
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 7 - 550 ug/kg
Sampling Result ID : 341260
Feature Id : Not reported
Hazard Release Id : 381152
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 19.5- to 33.5 feet bgs
Start Date : 1993-04-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .002 mg/L
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 120883
Code : 108-88-3
Substance Name : TOLUENE
Substance Abbrev. : Not reported
Substance Categ ID : 8520
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316466
Sub Alias Name : BENZENE,METHYL-
Substance Alias ID : 316467
Sub Alias Name : METHACIDE
Substance Alias ID : 316468
Sub Alias Name : METHYLBENZENE
Substance Alias ID : 316469
Sub Alias Name : METHYLBENZOL
Substance Alias ID : 316470
Sub Alias Name : PHENYLMETHANE
Substance Alias ID : 316471
Sub Alias Name : TOLUOL
Sampling Result ID : 341186
Feature Id : Not reported
Hazard Release Id : 381153
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 2 - 1100 ug/kg
Sampling Result ID : 341251
Feature Id : Not reported
Hazard Release Id : 381153
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .0053 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 120781
Code : 100-41-4
Substance Name : ETHYLBENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8515
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316146
Sub Alias Name : ETHYLBENZOL
Substance Alias ID : 316147
Sub Alias Name : PHENYLETHANE
Sampling Result ID : 341187
Feature Id : Not reported
Hazard Release Id : 381154
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 20 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 870 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 120782
Code : 100-42-5
Substance Name : STYRENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316148
Sub Alias Name : PHENYLETHYLENE
Substance Alias ID : 316149
Sub Alias Name : STYROL

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Substance Alias ID : 316150
Sub Alias Name : STYROLENE
Substance Alias ID : 316151
Sub Alias Name : VINYL BENZENE
Sampling Result ID : 341188
Feature Id : Not reported
Hazard Release Id : 381155
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 2 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121051
Code : 1330-20-7
Substance Name : XYLENES
Substance Abbrev. : Not reported
Substance Categ ID : 8526
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317017
Sub Alias Name : DIMETHYLBENZENES
Substance Alias ID : 317018
Sub Alias Name : XYLOLS
Sampling Result ID : 341189
Feature Id : Not reported
Hazard Release Id : 381156
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 20 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 9 - 14000 ug/kg
Quant. Released: Unknown
Date: Prior to 1982

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121868
Code : 91-20-3
Substance Name : NAPHTHALENE
Substance Abbrev. : Not reported
Substance Categ ID : 8494
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317793
Sub Alias Name : MOTH BALLS
Substance Alias ID : 317794
Sub Alias Name : NAPHTHENE
Substance Alias ID : 317795
Sub Alias Name : TAR CAMPHOR
Sampling Result ID : 347434
Feature Id : 0
Hazard Release Id : 381157
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : False
Sample Depth : MWP1-3
Start Date : 2000-09-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:10:19.
Sample Comment : 704 ug/kg
Sampling Result ID : 341190
Feature Id : 0
Hazard Release Id : 381157
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 20 to 26 ft bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:10:49.
Sample Comment : 990 mg/kg
Sampling Result ID : 341242
Feature Id : Not reported
Hazard Release Id : 381157
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number
Database(s)

S103841500

Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0026 - .0082 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121871
Code : 91-57-6
Substance Name : METHYLNAPHTHALENE,2-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317808
Sub Alias Name : METHYLNAPHTHALENE,beta-
Substance Alias ID : 317809
Sub Alias Name : NAPHTHALENE,2-METHYL-
Sampling Result ID : 341191
Feature Id : Not reported
Hazard Release Id : 381158
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 20 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 12000 - 790000 ug/kg
Sampling Result ID : 341243
Feature Id : Not reported
Hazard Release Id : 381158
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0019 - .0046 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121197
Code : 208-96-8
Substance Name : ACENAPHTHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 341192
Feature Id : Not reported
Hazard Release Id : 381159
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 180 - 2600000 ug/kg
Sampling Result ID : 341231
Feature Id : Not reported
Hazard Release Id : 381159
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .005 - .0091 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Update By: Not reported
Substance ID : 121815
Code : 83-32-9
Substance Name : ACENAPHTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8471
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317621
Sub Alias Name : DIHYDROACENAPHTHYLENE,1,2-
Substance Alias ID : 317622
Sub Alias Name : ETHYLENENAPHTHALENE,1,8-
Substance Alias ID : 317623
Sub Alias Name : PERIETHYLENENAPHTHALENE
Sampling Result ID : 341193
Feature Id : Not reported
Hazard Release Id : 381160
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 20 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 40000 - 680000 ug/kg
Sampling Result ID : 341230
Feature Id : Not reported
Hazard Release Id : 381160
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0016 - .013 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121829
Code : 86-73-7
Substance Name : FLUORENE

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Substance Abbrev. : Not reported
Substance Categ ID : 8489
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317663
Sub Alias Name : BIPHENYLENEMETHANE,o-
Substance Alias ID : 317664
Sub Alias Name : DIPHENYLENEMETHANE
Substance Alias ID : 317665
Sub Alias Name : METHYLENEBIPHENYL,2,2'-
Sampling Result ID : 341194
Feature Id : Not reported
Hazard Release Id : 381161
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 240 - 1700000 ug/kg
Sampling Result ID : 341240
Feature Id : Not reported
Hazard Release Id : 381161
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0035 - .011 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121824
Code : 85-01-8
Substance Name : PHENANTHRENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317648
Sub Alias Name : PHENATHRIN
Sampling Result ID : 341195
Feature Id : 0
Hazard Release Id : 381162
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:11:27.
Sample Comment : 20,000 mg/kg
Sampling Result ID : 341224
Feature Id : Not reported
Hazard Release Id : 381162
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .028 - .21 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 120952
Code : 120-12-7
Substance Name : ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8473
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316696
Sub Alias Name : ANTHRACIN
Substance Alias ID : 316697
Sub Alias Name : GREEN OIL
Substance Alias ID : 316698
Sub Alias Name : PARANAPHTHALENE

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Substance Alias ID : 316699
Sub Alias Name : TETRA OLIVE N2G
Sampling Result ID : 347427
Feature Id : 0
Hazard Release Id : 381163
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3
Start Date : 2000-09-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:40:57.
Sample Comment : 43.3 ug/L
Sampling Result ID : 341196
Feature Id : 0
Hazard Release Id : 381163
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3, 18.5 Ft
Start Date : 2000-08-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:40:12.
Sample Comment : 6,060 mg/kg
Sampling Result ID : 341232
Feature Id : Not reported
Hazard Release Id : 381163
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0052 - .018 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Substance ID : 121195
Code : 206-44-0
Substance Name : FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8491
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317398
Sub Alias Name : BENZACENAPHTHENE,1,2-
Substance Alias ID : 317399
Sub Alias Name : BENZO(jk)FLUORENE
Sampling Result ID : 341197
Feature Id : Not reported
Hazard Release Id : 381164
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 1600 - 12000000 ug/kg
Sampling Result ID : 341225
Feature Id : Not reported
Hazard Release Id : 381164
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .044 - .16 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121019
Code : 129-00-0
Substance Name : PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8497
Substance Sub Categ : Semi-volatiles

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316950
Sub Alias Name : BENZO(def)PHENANTHRENE
Sampling Result ID : 341198
Feature Id : 0
Hazard Release Id : 381165
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:12:08.
Sample Comment : 17000 mg/kg
Sampling Result ID : 341226
Feature Id : Not reported
Hazard Release Id : 381165
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .046 - .22 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121462
Code : 56-55-3
Substance Name : BENZO(a)ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8475
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318790
Sub Alias Name : BENZ(a)ANTHRACENE
Substance Alias ID : 318791
Sub Alias Name : BENZANTHRACENE,1,2-
Substance Alias ID : 318792

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Sub Alias Name : BENZANTHRENE
Substance Alias ID : 318793
Sub Alias Name : BENZOANTHRACENE
Substance Alias ID : 318794
Sub Alias Name : BENZPHENANTHRENE,2,3-
Substance Alias ID : 318795
Sub Alias Name : NAPHTHANTHRACENE
Substance Alias ID : 318796
Sub Alias Name : TETRAPHENE
Sampling Result ID : 347428
Feature Id : 0
Hazard Release Id : 381166
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3
Start Date : 2001-06-14 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-08-19 15:16:03.
Sample Comment : 4.6 ug/L
Sampling Result ID : 341199
Feature Id : 0
Hazard Release Id : 381166
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3, 18.5 Ft
Start Date : 2000-08-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:45:29.
Sample Comment : 4,740 mg/kg
Sampling Result ID : 341233
Feature Id : Not reported
Hazard Release Id : 381166
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103841500

Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .024 - .067 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121210
Code : 218-01-9
Substance Name : CHRYSENE
Substance Abbrev. : Not reported
Substance Categ ID : 8481
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317438
Sub Alias Name : BENZ(a)PHENANTHRENE
Substance Alias ID : 317439
Sub Alias Name : BENZPHENANTHRENE,1,2-
Substance Alias ID : 317440
Sub Alias Name : DIBENZONAPHTHALENE,1,2,5,6-
Sampling Result ID : 341200
Feature Id : Not reported
Hazard Release Id : 381167
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 710 - 4300000 ug/kg
Sampling Result ID : 341238
Feature Id : Not reported
Hazard Release Id : 381167
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .039 - .11 mg/kg

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121192
Code : 205-99-2
Substance Name : BENZO(b)FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8477
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317390
Sub Alias Name : B(b)F
Substance Alias ID : 317391
Sub Alias Name : BENZ(e)ACEPHENANTHRYLENE
Substance Alias ID : 317392
Sub Alias Name : BENZFLUORANTHENE,3,4-
Substance Alias ID : 317393
Sub Alias Name : BENZOFLUORANTHENE,2,3-
Substance Alias ID : 317394
Sub Alias Name : BENZOFLUORANTHENE,3,4-
Sampling Result ID : 347429
Feature Id : 0
Hazard Release Id : 381168
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3
Start Date : 2000-09-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:48:26.
Sample Comment : 18.5 ug/L
Sampling Result ID : 341201
Feature Id : 0
Hazard Release Id : 381168
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3, 18.5 Ft
Start Date : 2000-08-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:47:51.
Sample Comment : 4,370 mg/kg

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Sampling Result ID : 341235
Feature Id : Not reported
Hazard Release Id : 381168
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .044 - .12 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121196
Code : 207-08-9
Substance Name : BENZO(k)FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8478
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317400
Sub Alias Name : B(k)F
Substance Alias ID : 317401
Sub Alias Name : BENZOFLUORANTHENE,11,12-
Sampling Result ID : 337566
Feature Id : 0
Hazard Release Id : 381169
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : UCBH1B, 20 Ft
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:50:20.
Sample Comment : 2,000 mg/kg
Sampling Result ID : 341237
Feature Id : Not reported
Hazard Release Id : 381169
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .022 - .12 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121374
Code : 50-32-8
Substance Name : BENZO(a)PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8476
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318559
Sub Alias Name : B(a)P
Substance Alias ID : 318560
Sub Alias Name : BENZOPYRENE,3,4-
Substance Alias ID : 318561
Sub Alias Name : BENZPYRENE,3,4-
Substance Alias ID : 318562
Sub Alias Name : BP
Sampling Result ID : 347470
Feature Id : 0
Hazard Release Id : 381170
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3
Start Date : 2001-06-14 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-08-19 15:18:02.
Sample Comment : 2.89 ug/L
Sampling Result ID : 341202
Feature Id : 0
Hazard Release Id : 381170
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Lab Data : True
Sample Depth : MWP-1-3, 18.5 ft
Start Date : 2000-08-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-08-19 15:17:23.
Sample Comment : 5,200 mg/kg
Sampling Result ID : 341234
Feature Id : Not reported
Hazard Release Id : 381170
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .037 - .1 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121176
Code : 193-39-5
Substance Name : INDENO(1,2,3-cd)PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8493
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317339
Sub Alias Name : PHENYLENEPYRENE,2,3-
Substance Alias ID : 317340
Sub Alias Name : PHENYLENEPYRENE,o-
Sampling Result ID : 341203
Feature Id : 0
Hazard Release Id : 381171
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 26 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:07:58.
Sample Comment : 1700 mg/kg
Sampling Result ID : 341241
Feature Id : Not reported
Hazard Release Id : 381171
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .023 - .091 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121167
Code : 191-24-2
Substance Name : BENZO(ghi)PERYLENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317305
Sub Alias Name : B(ghi)P
Substance Alias ID : 317306
Sub Alias Name : BENZOPERYLENE,1,12-
Substance Alias ID : 317307
Sub Alias Name : BENZPERYLENE,1,12-
Sampling Result ID : 341204
Feature Id : 0
Hazard Release Id : 381172
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP-1-3, 18.5 FT
Start Date : 2000-08-30 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-08-19 15:18:52.
Sample Comment : 4,310 mg/kg
Sampling Result ID : 341236

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Feature Id : Not reported
Hazard Release Id : 381172
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0088 - .048 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121303
Code : 319-85-7
Substance Name : BHC,beta-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318364
Sub Alias Name : BENZENE HEXACHLORIDE,beta-
Substance Alias ID : 318365
Sub Alias Name : HCH,beta-
Substance Alias ID : 318366
Sub Alias Name : HEXACHLOROCYCLOHEXANE,beta-
Substance Alias ID : 318367
Sub Alias Name : LINDANE,beta-
Sampling Result ID : 341205
Feature Id : Not reported
Hazard Release Id : 381173
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 11.5 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 3900 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Update By: Not reported
Substance ID : 121727
Code : 76-44-8
Substance Name : HEPTACHLOR
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319448
Sub Alias Name : HEPTAMUL
Substance Alias ID : 319449
Sub Alias Name : VELSICOL 104
Sampling Result ID : 341206
Feature Id : Not reported
Hazard Release Id : 381174
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 11.5- to 20 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 46 - 300 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 120814
Code : 1024-57-3
Substance Name : HEPTACHLOR EPOXIDE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316215
Sub Alias Name : VELSICOL 53-CS-17
Sampling Result ID : 341207
Feature Id : Not reported
Hazard Release Id : 381175
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 8- to 20 feet bgs
Start Date : 1989-05-22 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 55 - 290 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121516
Code : 60-57-1
Substance Name : DIELDRIN
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318927
Sub Alias Name : HEOD
Substance Alias ID : 318928
Sub Alias Name : OCTALOX
Sampling Result ID : 341250
Feature Id : Not reported
Hazard Release Id : 381176
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .57 - 2.4 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121313
Code : 33213-65-9
Substance Name : ENDOSULFAN II
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318398
Sub Alias Name : ENDOSULFAN,beta-
Substance Alias ID : 318399
Sub Alias Name : THIODAN II

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103841500

Sampling Result ID : 341210
Feature Id : Not reported
Hazard Release Id : 381178
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 11.5 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 210 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121373
Code : 50-29-3
Substance Name : DDT,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318555
Sub Alias Name : BIS(p-CHLOROPHENYL)-2,2,2-TRICHLOROETHANE,1,1-
Substance Alias ID : 318556
Sub Alias Name : CHLOROPHENOTHANE
Substance Alias ID : 318557
Sub Alias Name : DICHLORODIPHENYLTRICHLOROETHANE
Substance Alias ID : 318558
Sub Alias Name : ETHANE,1,1,1-TRICHLORO-2,2-BIS(p-CHLOROPHENYL)-
Sampling Result ID : 341211
Feature Id : 0
Hazard Release Id : 381179
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : SB-12, 2-3 Ft
Start Date : 2000-08-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-08-19 15:21:51.
Sample Comment : 58.1 ug/kg
Sampling Result ID : 341249
Feature Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Hazard Release Id : 381179
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .6 - 1.4 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121613
Code : 72-43-5
Substance Name : METHOXYCHLOR
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319190
Sub Alias Name : DMDT
Substance Alias ID : 319191
Sub Alias Name : ETHANE,1,1,1-TRICHLORO-2,2'-BIS(p-METHOXYPHENYL)-
Substance Alias ID : 319192
Sub Alias Name : MARLATE
Substance Alias ID : 319193
Sub Alias Name : METHOXY-DDT
Sampling Result ID : 341212
Feature Id : Not reported
Hazard Release Id : 381180
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 11.5 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 2700 ug/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 2000-04-18 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Substance ID : 121400
Code : 5103-74-2
Substance Name : CHLORDANE,TRANS-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318635
Sub Alias Name : CHLORDANE,gamma
Sampling Result ID : 341213
Feature Id : Not reported
Hazard Release Id : 381181
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 11.5 feet bgs
Start Date : 1989-05-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 1000 ug/kg
Sampling Result ID : 341246
Feature Id : Not reported
Hazard Release Id : 381181
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .28 ug/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121819
Code : 84-66-2
Substance Name : DIETHYL PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number
Database(s)

S103841500

Create Date : Not reported
Substance Alias ID : 317633
Sub Alias Name : BENZENEDICARBOXYLIC ACID,1,2-, DIETHYL ESTER
Substance Alias ID : 317634
Sub Alias Name : DIETHYL PHTHALATE,o-
Substance Alias ID : 317635
Sub Alias Name : ETHYL PHTHALATE
Substance Alias ID : 317636
Sub Alias Name : PHTHALIC ACID, DIETHYL ESTER
Sampling Result ID : 341223
Feature Id : Not reported
Hazard Release Id : 381182
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1989-08-22 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 510 ug/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121415
Code : 53-70-3
Substance Name : DIBENZO(a,h)ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8499
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318667
Sub Alias Name : DB(a,h)A
Substance Alias ID : 318668
Sub Alias Name : DIBENZ(a,h)ANTHRACENE
Substance Alias ID : 318669
Sub Alias Name : DIBENZANTHRACENE,1,2-5,6-
Substance Alias ID : 318670
Sub Alias Name : DIBENZANTHRACENE,1,2:5,6-
Sampling Result ID : 341239
Feature Id : Not reported
Hazard Release Id : 381183
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0064 - .029 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121045
Code : 132-64-9
Substance Name : DIBENZOFURAN
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316997
Sub Alias Name : DIPHENYLENE OXIDE
Sampling Result ID : 341244
Feature Id : Not reported
Hazard Release Id : 381184
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .0021 - .0024 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121399
Code : 5103-71-9
Substance Name : CHLORDANE,CIS-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318634
Sub Alias Name : CHLORDANE,alpha-
Sampling Result ID : 341245
Feature Id : Not reported
Hazard Release Id : 381185

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

Database(s)
EDR ID Number
EPA ID Number

S103841500

Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .33 ug/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121614
Code : 72-54-8
Substance Name : DDD,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319194
Sub Alias Name : DICHLORO-2,2-BIS(p-CHLOROPHENYL)ETHANE,1,1-
Substance Alias ID : 319195
Sub Alias Name : DICHLORODIPHENYLDICHLOROETHANE
Substance Alias ID : 319196
Sub Alias Name : RHOTHANE
Substance Alias ID : 319197
Sub Alias Name : TDE
Substance Alias ID : 319198
Sub Alias Name : TDE,p,p'-
Substance Alias ID : 319199
Sub Alias Name : TETRACHLORODIPHENYLETHANE
Sampling Result ID : 347432
Feature Id : 0
Hazard Release Id : 381186
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : SB-12, 23 Ft
Start Date : 2000-08-29 12:59:56
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:01:02.
Sample Comment : 56.9 ug/L
Sampling Result ID : 341247

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number
Database(s)

S103841500

Feature Id : Not reported
Hazard Release Id : 381186
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 1 - 4.4 ug/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-04-09 00:00:00
Update By: Not reported
Substance ID : 121615
Code : 72-55-9
Substance Name : DDE,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319200
Sub Alias Name : BIS(p-CHLOROPHENYL)-1,1-DICHLOROETHYLENE,2,2-
Substance Alias ID : 319201
Sub Alias Name : DICHLORODIPHENYL DICHLOROETHYLENE,p,p'-
Substance Alias ID : 319202
Sub Alias Name : DICHLOROETHENYLIDENE)BIS(4-CHLOROBENZENE),1,1'-(-
Sampling Result ID : 347433
Feature Id : 0
Hazard Release Id : 381187
Medium Code Id : 701
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:03:10.
Sample Comment : 1.1 - 2.8 ug/kg
Sampling Result ID : 341248
Feature Id : 0
Hazard Release Id : 381187
Medium Code Id : 703
Substance Id : 0

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : SB-10, 15.5 Ft
Start Date : 2000-08-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-08-19 15:21:09.
Sample Comment : 10.7 ug/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 120837
Code : 106-44-5
Substance Name : CRESOL,4-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316281
Sub Alias Name : CRESOL,p-
Substance Alias ID : 316282
Sub Alias Name : CRESYLIC ACID,p-
Substance Alias ID : 316283
Sub Alias Name : HYDROXY-4-METHYLBENZENE,1-
Substance Alias ID : 316284
Sub Alias Name : HYDROXYTOLUENE,4-
Substance Alias ID : 316285
Sub Alias Name : HYDROXYTOLUENE,p-
Substance Alias ID : 316286
Sub Alias Name : METHYLHYDROXYBENZENE,p-
Substance Alias ID : 316287
Sub Alias Name : METHYLPHENOL,4-
Substance Alias ID : 316288
Sub Alias Name : METHYLPHENOL,p-
Substance Alias ID : 316289
Sub Alias Name : OXYTOLUENE,p-
Substance Alias ID : 316290
Sub Alias Name : TOLYL ALCOHOL,p-
Sampling Result ID : 341252
Feature Id : Not reported
Hazard Release Id : 381188
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .029 - .22 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121577
Code : 65-85-0
Substance Name : BENZOIC ACID
Substance Abbrev. : Not reported
Substance Categ ID : 8479
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319080
Sub Alias Name : BENZENECARBOXYLIC ACID
Substance Alias ID : 319081
Sub Alias Name : CARBOXYBENZENE
Substance Alias ID : 319082
Sub Alias Name : DRACYCLIC ACID
Substance Alias ID : 319083
Sub Alias Name : PHENYLCARBOXYLIC ACID
Substance Alias ID : 319084
Sub Alias Name : PHENYLFORMIC ACID
Sampling Result ID : 347430
Feature Id : 0
Hazard Release Id : 381189
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MW-5 (Mt Hood Metals)
Start Date : 2000-09-19 15:19:02
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-08-19 15:19:24.
Sample Comment : 46 mg/L
Sampling Result ID : 341253
Feature Id : Not reported
Hazard Release Id : 381189
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)
EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .037 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 120941
Code : 117-81-7
Substance Name : BIS(2-ETHYLHEXYL)PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : 8480
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316655
Sub Alias Name : BIS(2-ETHYLHEXYL)-1,2-BENZENEDICARBOXYLATE
Substance Alias ID : 316656
Sub Alias Name : BIS(2-ETHYLHEXYL)-o-PHTHALATE
Substance Alias ID : 316657
Sub Alias Name : DI(2-ETHYLHEXYL)ORTHOPHTHALATE
Substance Alias ID : 316658
Sub Alias Name : DI-2-ETHYLHEXYLPHTHALATE
Substance Alias ID : 316659
Sub Alias Name : DI-sec-OCTYL PHTHALATE
Substance Alias ID : 316660
Sub Alias Name : DIOCTYL PHTHALATE
Substance Alias ID : 316661
Sub Alias Name : PHTHALIC ACID, BIS(2-ETHYLHEXYL) ESTER
Sampling Result ID : 341254
Feature Id : Not reported
Hazard Release Id : 381190
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .088 - .24 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121826
Code : 85-68-7
Substance Name : BUTYL BENZYL PHTHALATE
Substance Abbrev. : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317652
Sub Alias Name : BENZYL-n-BUTYL PHTHALATE
Substance Alias ID : 317653
Sub Alias Name : PHTHALIC ACID, BENZYL BUTYL ESTER
Sampling Result ID : 341255
Feature Id : Not reported
Hazard Release Id : 381191
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .014 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121821
Code : 84-74-2
Substance Name : DI-n-BUTYL PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317639
Sub Alias Name : BENZENEDICARBOXYLIC ACID,1,2-, DIBUTYL ESTER
Substance Alias ID : 317640
Sub Alias Name : BUTYL PHTHALATE
Substance Alias ID : 317641
Sub Alias Name : BUTYL PHTHALATE,n-
Substance Alias ID : 317642
Sub Alias Name : DBP
Substance Alias ID : 317643
Sub Alias Name : DIBUTYL PHTHALATE
Sampling Result ID : 341256
Feature Id : Not reported
Hazard Release Id : 381192
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 0.84 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 120909
Code : 11097-69-1
Substance Name : PCB 1254
Substance Abbrev. : Not reported
Substance Categ ID : 8556
Substance Sub Categ : PCB Substances for the OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316559
Sub Alias Name : AROCHLOR 1254
Substance Alias ID : 316560
Sub Alias Name : AROCLOR 1254
Sampling Result ID : 341258
Feature Id : Not reported
Hazard Release Id : 381193
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .14 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 120887
Code : 108-95-2
Substance Name : PHENOL
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316484

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Sub Alias Name : BENZENE, HYDROXY-
Substance Alias ID : 316485
Sub Alias Name : CARBOLIC ACID
Substance Alias ID : 316486
Sub Alias Name : HYDROXYBENZENE
Substance Alias ID : 316487
Sub Alias Name : OXYBENZENE
Substance Alias ID : 316488
Sub Alias Name : PHENIC ACID
Substance Alias ID : 316489
Sub Alias Name : PHENYL HYDRATE
Substance Alias ID : 316490
Sub Alias Name : PHENYL HYDROXIDE
Sampling Result ID : 341257
Feature Id : Not reported
Hazard Release Id : 381194
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - .071 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121608
Code : 71-43-2
Substance Name : BENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8502
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319178
Sub Alias Name : BENZOL
Substance Alias ID : 319179
Sub Alias Name : COAL NAPHTHA
Substance Alias ID : 319180
Sub Alias Name : CYCLOHEXATRIENE
Substance Alias ID : 319181
Sub Alias Name : PHENE
Substance Alias ID : 319182
Sub Alias Name : PYROBENZOL
Sampling Result ID : 341259
Feature Id : 0
Hazard Release Id : 381195
Medium Code Id : 698

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP1-3
Start Date : 2001-06-14 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:43:59.
Sample Comment : 17.8 ug/L
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-07-10 00:00:00
Update By: Not reported
Substance ID : 122012
Code : ECD275
Substance Name : TOTAL PETROLEUM HYDROCARBONS (TPH)
Substance Abbrev. : Not reported
Substance Categ ID : 8540
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 341323
Feature Id : Not reported
Hazard Release Id : 381239
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface soils
Start Date : 1995-09-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 140000 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-07-10 00:00:00
Update By: Not reported
Substance ID : 121983
Code : ECD173
Substance Name : GASOLINE
Substance Abbrev. : Not reported
Substance Categ ID : 8530
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 341325
Feature Id : Not reported
Hazard Release Id : 381242
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 5 feet bgs
Start Date : 1995-09-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 1800 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-07-10 00:00:00
Update By: Not reported
Substance ID : 121988
Code : ECD198
Substance Name : OIL - LUBRICATING
Substance Abbrev. : Not reported
Substance Categ ID : 8531
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 341326
Feature Id : Not reported
Hazard Release Id : 381243
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 0 - 20 feet bgs
Start Date : 1995-09-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 20 mg/kg
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-07-10 00:00:00
Update By: Not reported
Substance ID : 120908

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103841500

Code : 11096-82-5
Substance Name : PCB 1260
Substance Abbrev. : Not reported
Substance Categ ID : 8496
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8557
Substance Sub Categ : PCB Substances for the OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316557
Sub Alias Name : AROCHLOR 1260
Substance Alias ID : 316558
Sub Alias Name : AROCLOR 1260
Sampling Result ID : 341327
Feature Id : Not reported
Hazard Release Id : 381244
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface
Start Date : 1995-10-06 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : 0 - 16 mg/kg
Quant. Released: Unknown
Date: Prior to 1982
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121472
Code : 57-12-5
Substance Name : CYANIDE (AS ION)
Substance Abbrev. : Not reported
Substance Categ ID : 8465
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318818
Sub Alias Name : CN (AS ION)
Sampling Result ID : 346051
Feature Id : 0
Hazard Release Id : 382906
Medium Code Id : 703
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Lab Data : True
Sample Depth : UCBH1B, 20 Ft
Start Date : 1989-01-02 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:58:40.
Sample Comment : 83.5 mg/kg
Sampling Result ID : 341169
Feature Id : 0
Hazard Release Id : 382906
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MW-5 (Mt Hood Metals)
Start Date : 2001-06-18 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:59:40.
Sample Comment : 0.235 ug/L
Sampling Result ID : 341170
Feature Id : Not reported
Hazard Release Id : 382906
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1994-06-28 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-04-18 00:00:00
Sample Comment : .21 - .67 mg/kg
Quant. Released: Not reported
Date: Not reported
Update Date: 2003-07-29 12:53:29.
Update By: JWAGGY
Substance ID : 121830
Code : 86-74-8
Substance Name : CARBAZOLE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Sub Alias Name : Not reported
Sampling Result ID : 347431
Feature Id : 0
Hazard Release Id : 386015
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MWP1-3
Start Date : 2000-09-20 12:53:40
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 12:54:39.
Sample Comment : 209 ug/L
Quant. Released: Not reported
Date: Not reported
Update Date: 2003-07-29 13:14:56.
Update By: JWAGGY
Substance ID : 121677
Code : 7440-62-2
Substance Name : VANADIUM
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319300
Sub Alias Name : V
Sampling Result ID : 347435
Feature Id : 0
Hazard Release Id : 386016
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : MW-5 (Mt Hood Metals)
Start Date : 2000-09-19 13:15:04
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : JWAGGY
Last Updated On : 2003-07-29 13:16:03.
Sample Comment : 0.9 mg/L

Alias Name: American Compost and Recycling, Inc.
 Elkem Metals Company
 Gilmour Steel
 Mt.Hood Metals Inc.
 Oregon Soil Corp.
 Oregon Steel Mills
 WMR, Incorporated

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Investigation Status: 207

NARR:

NARR ID: 5729883
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments PAHs, toxic metals, cyanide, phenols, phthalates, VOCs, chlorinated pesticides and pesticide decomposition products.

Potential threat to humans in contact with soil and buried sludge, consuming contaminated groundwater, and potential threat to humans consuming contaminated fish tissue from slough. Potential direct contact with PCBs and PAHs. Potential wind-blown t

hreat from ash pile with lead contamination. Potential direct contact with contaminated material at western sludge pond.

Settling ponds are unlined, and contaminants appear to be leaching to shallow groundwater.

Shallow groundwater may be used for domestic purposes - needs better definition, though. Groundwater may discharge to Columbia Slough and affect aquatic life in the slough (fish caught from Columbia Slough are evidently used for human consumption).

SEE ALSO ECSI #2058, MT. HOOD METALS, INC. (1998/SAS) Before 1976, Union Carbide discharged scrubber water (from its air pollution control equipment) to settling ponds. They also had a permit to discharge up to 0.75 pound/day cyanide into the ponds.

Previous analyses of sludge pond sediments (Elkem Metals Company, 1982; DEQ, 1987; EPA SI, 1989; Mt.Hood Metals, 1993) indicate substantial contaminant concentrations, which may be leaching to groundwater. Slough sediment analyses (E&E, 1994) sugges

t pond sediment contaminants may be reaching the Columbia Slough. Sludge/slag were also sent to a settling pond on the site's western parcels. There is: 1) subsurface petroleum contamination associated with former USTs and ASTs on the western parcel

s; 2) Surface soil contamination (petroleum and metals) in and near former processing building, paint storage shed, and palletized waste drums; 3) PCB-contaminated soil and concrete at the electrical substation; and 4) a lead-contaminated ash pile a long the eastern site boundary.

Sludge settling ponds evidently received scrubber sludge from Union Carbide air pollution control processes, but other materials were evidently also buried in the ponds, including process slag, concrete, asphalt, and evidently metal debris.

SEE ALSO ECSI #2058, MT. HOOD METALS, INC. Other sources of data for the site:

1) Inspection reports. 2) EPA Preliminary Assessment prepared by DEQ (8/31/88). 3) Monitoring data. 4) DEQ interoffice memos. 5) EPA Site Inspection prepared by E & E (12 /89). 6) Elkem Metals/DEQ pond sediment analyses (1982). 7) Analyses of Columbia Slough sediments - City of Portland (1994). 8) Preliminary Hydrogeological Assessment of Mt.Hood Metals (1993). 9) Site Characterization by Hart Crowser (11/95)

Two former scrubber sludge disposal ponds were located between N Columbia Blvd. and the Columbia Slough. Both ponds were filled in by 1987 or 1988. The south pond was evidently filled in with gravel or silty gravel. A composting operation (American

Compost & Recycling, Inc./Oregon Soil Corp.) currently operates above the northern pond. Mt. Hood Metals, Inc., a metals salvaging operation, currently

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
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UNION CARBIDE CORP. (Continued)

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operates above the southern pond. Mt. Hood Metals constructed a concrete pad over the entire southern pond between 11/96 and 3/97. Mt. Hood Metals discharges its stormwater runoff through the remnants of the south pond's former overflow discharge pipe. Two residential properties lie along the southern boundary of Mt. Hood Metals. The former For

mer Union Carbide main processing building has contaminated earthen floor. Six USTs removed from site in 1986 - at least two leaked. Site has electrical substation with PCB-contaminated soils and concrete surfaces. "Ash-like" material at site has elevated lead content.

SEE ALSO ECSI #2058, MT. HOOD METALS, INC. Cyanide (HCN), PAHs, toxic metals, chlorinated pesticides and their decomposition products, PCBs, phthalates, phenols, low concentrations of VOCs.

The two sludge ponds were unlined, and constructed in sand/silty sand/sandy silt, with a compacted sand berm between them. The southern pond was evidently backfilled with gravel, or silty gravel. The southern sludge pond was covered with a concrete pad between 11/96 and 3/97 (Mt. Hood Metals), although shallow groundwater (3-5 feet bgs) may continue to percolate through that pond's sediments. Deeper groundwater (15-20 feet bgs) may periodically saturate the pond sediments. Groundwater is contaminated in the area of the ponds, and may discharge to the Columbia Slough. Analysis of slough sediments suggests that pond contaminants may be affecting aquatic life within the slough. It is unclear if local groundwater is used for drinking water.

Subsurface petroleum contamination at former UST locations; surface and subsurface petroleum contamination at AST locations; PCB contaminated soils and concrete at electrical substation; pile of "ash-like" material has elevated lead content; groundwater at southwestern end of site has low-level chlorinated solvents; surface soils in and around former processing building have petroleum contamination. Industrial/commercial. Residential properties border the southern pond site. The Columbia Slough lies within 50-85 feet of the two sludge ponds. It is unclear if the electrical substation is a long-term operating substation. Sludge settling/disposal ponds are between N Columbia Blvd. and Columbia Slough. Western parcels (74 acres) in pocket formed by N Lombard, N Burgard, N Columbia Blvd., and Terminal Rd.

Discharge of wastewater to pond prior to 1976. Shallow groundwater (3-5 feet bgs) may percolate through sediments. Deeper groundwater (15-20 feet bgs) may saturate lower portion of pond periodically. Groundwater is contaminated, and may discharge to Columbia Slough. UST releases, surface spills, waste pile storage, possible drum leakage.

Sludge pond sediments. Shallow groundwater. Columbia Slough sediments. Surface and subsurface soils. Concrete surfaces.

South pond currently owned by George J Bors (18112 NW Sauvie Island Rd, Portland) and Bert P Bors (22236 NW Gillihan Rd, Portland), PO Box 83123, Portland 97283-0123. North pond is currently owned by American Composting Western parcels (74 acres) purchased by WMR, Incorporated, in September 1997. WMR is a Domestic Limited Liability Company registered in the State of Washington. Business address is 2909 - 200th Avenue East, Sumner WA 98371 (253)862-8037. WMR, L.L.C members are: William A Davis (2909 - 200th Ave, Sumner, WA 98371), Mark W Robinson (PO Box 1730, Sumner, WA 98390), and Richard J Padden (1002 - 36th Avenue East, Seattle, WA 98112). Site was on CERCLIS until EPA issued an NFA in April 1994. Because of

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Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

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Database(s)

UNION CARBIDE CORP. (Continued)

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contaminant concentrations in pond sediments, contaminated shallow groundwater, and contaminated slough sediments, a Remedial Investigation and Feasibility Study seem appropriate. Further characterization/investigation, risk assessment, and cleanup necessary on western parcels (74 acres). Soil contamination, groundwater contamination, potential discharge of contaminated groundwater to Columbia Slough. Direct contact with contaminated pond sediments unlikely, but human consumption of contaminated groundwater is a possibility, along with potential human consumption of contaminated fish tissue from slough. Sediment contamination within the slough suggests that aquatic life within the slough may already be affected. Direct contact at electrical substation and with surface soils near and inside former processing building. Possible direct contact with contamination at western sludge pond. Possible wind-blown hazard with "ash-like" material stockpiled near eastern site boundary. Possible domestic groundwater use at nearby residence.

(9/28/88 DAB/SAS) Union Carbide wants to close ponds permanently. (9/4/97 SMF/SAS) Mt. Hood Metals, Inc. installed a concrete pad over the entire southern pond during Nov 1996 - March 1997. Shallow groundwater at the site (3-5 feet bgs) may continue to percolate through that pond's sediments, though. Deeper groundwater (15-20 feet bgs), at times, appears to rise above the bottom of the southern pond. Data from hydrogeologic survey for Mt. Hood Metals suggests that contaminants have affected local groundwater. Further assessment is appropriate for: 1) surface and subsurface petroleum and metals contamination; 2) PCB contamination at the electrical substation; 3) stockpiled ash; 4) western sludge pond; and 5) former open ditch. (4/8/99 MDK/SRP) The site was assigned to the Site Response Program (SRP) 3/1/99. The initial PRP notice letter was sent 4/9/99. DEQ intends to have a Consent Order in place by third quarter 1999. (1/3/00 MDK/SRP) A final Consent Order was sent to RPs for signature 12/17/99. DEQ anticipates submittal of RI Workplan in second quarter 2000. (4/13/00 MDK/SRP) The Consent Order was signed by DEQ 1/28/00 and went into effect on that date. DEQ and RPs held a project scoping meeting 3/23/00. A draft RI work plan and supporting documents are to be submitted 5/22/00. Field work is expected to be conducted during 3rd and 4th quarters 2000. Field work for an ecological Level 1 Scoping report is expected to occur the 2nd quarter of 2000. (9/20/00 MDK/SRP) The RI workplan was approved in June 2000 and field work for the initial phase of investigation will be completed in September 2000. A meeting to discuss RI results is expected to be held in fourth quarter 2000. (5/29/01 MDK/SRP) The Phase II RI work plan has been approved, and field work will occur in June 2001. DEQ met with Union Carbide (now Dow Chemical) 5/22/01 to discuss agency comments on the draft Columbia Slough Sediment Sampling work plan. The sediment work plan will be revised and resubmitted in June 2001 with field work to occur in July or August 2001. (11/16/01 MDK/SRP) A work plan for phase II RI was submitted in February 2001 and approved in June 2001. The work was conducted in June 2001. A work plan for investigation of Columbia Slough sediments was submitted in June 2001 and approved in August 2001. Slough sediment sampling was conducted in September and October 2001. DEQ met with Union Carbide in December 2001 to discuss the results of the sediment sampling.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
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Database(s)

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A final sediment sampling report was submitted in March 2002 and is under review. A draft RI/RA report is expected to be submitted during third quarter 2002. (7/14/03 MDK/C&ER) A draft RI/RA Report was submitted in July 2002, and DEQ review comments were issued in April 2003. Data gaps for groundwater monitoring to support finalization of the RI/RA report were identified by DEQ. Union Carbide and Elkem are preparing a written response. DEQ concluded from the results of the Slough sediment sampling that concentrations of site-related chemicals present in the sediments do not exceed, or slightly exceed, conservative threshold ecological screening criteria and do not exceed concentrations in sediments up or down stream from the site. DEQ notified the RPS in August 2002, there is no basis for a Slough removal action or further investigation at this time.

NARR ID: 5729884
NARR Code : Disposals
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729885
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729886
NARR Code : General Site Description
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729887
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729888
NARR Code : Project Issues Summary
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729889
NARR Code : Land Use (Current/Reasonably Likely)
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5729890
NARR Code : Site Location
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

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NARR ID: 5730080
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730930
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730931
NARR Code : Site Ownership
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: JWAGGY
Updated Date: 2003-07-29 13:33:05
NARR ID: 5730932
NARR Code : Project Activity Status
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730933
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730934
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: JWAGGY
Updated Date: 2003-08-19 15:30:34
NARR ID: 5725895
NARR Code : Substances of Concern
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5728327
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: JWAGGY
Updated Date: 2003-07-29 13:17:05
NARR ID: 5728328
NARR Code : Containment Units
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5728329
NARR Code : Water Use (Current/Reasonably Likely)
Created By: Not reported

Map ID
Direction
Distance
Distance (ft.)
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MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

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Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 131585
Site Name: Union Carbide Corp.
County Code : 26.00
Owner Name: Union Carbide Corp.
Owner Address: 11920 N Burgard ST
Portland, 97203

FACA Id : 8883

Lat/Long 45.6105 / -122.7638
Owner Code: LIS

Owner Site Num: 131586
Site Name: Union Carbide Corp.
County Code : 26.00
Owner Name: WMR, Incorporated
Owner Address: 11920 N Burgard ST
Portland, 97203

FACA Id : 8883

Lat/Long 45.6105 / -122.7638
Owner Code: LIS

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 704307
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 459
Comments : Not reported

Action ID: 9409
Start Date: 2000-01-28 00:00:00
Region ID: Northwestern Region
Substance Code: SRS
Cleanup Flag: False
Update Date: 2001-06-20 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 704308
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 459
Comments : Not reported

Action ID: 9436
Start Date: 2000-01-28 00:00:00
Region ID: Northwestern Region
Substance Code: SRS
Cleanup Flag: False
Update Date: 2001-06-20 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709559
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Comments received from Christopher R. Herman; Stoeel Rives, L.L.P. on behalf of Oregon Steel Mills, Inc.

Action ID: 9451
Start Date: 1998-04-03 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

UNION CARBIDE CORP. (Continued)

EDR ID Number
EPA ID Number

Database(s)

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Admin ID:	709565	Action ID:	9480
Agency ID :	Dept Of Environmental Quality	Start Date:	1988-08-28 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	196		
Comments :	Not reported		

Admin ID:	709566	Action ID:	9437
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-10-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Considers both eastern sludge ponds, and western parcels of former site.		

Admin ID:	709567	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-10-03 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	709568	Action ID:	9499
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-10-03 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	710333	Action ID:	9426
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Site re-evaluated as part of federal screening of Mt Hood Metals site (ECSI #2058). Both western and eastern tracts of former site were evaluated.		

Admin ID:	710888	Action ID:	9459
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Not reported
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710990
Agency ID : Dept Of Environmental Quality
Further Action: High-Medium
Complete Date: 257
Rank Value: 85
Updated By: jmd
Created By: Not reported
Employee Id: 349
Comments : RI/FS recommended for both the eastern sludge ponds and western tracts of site
Action ID: 9503
Start Date: 1997-10-03 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 715837
Agency ID : Environmental Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: Not reported
Comments : Not reported
Action ID: 9444
Start Date: 1994-04-28 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1995-09-12 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 721162
Agency ID : Environmental Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: CONV
Created By: Not reported
Employee Id: Not reported
Comments : EPA finds that additional investigation may be warranted.
Action ID: 9512
Start Date: 1990-02-02 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1994-09-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 706500
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 459
Comments : Negotiations.
Action ID: 9412
Start Date: 1999-03-01 00:00:00
Region ID: Northwestern Region
Substance Code: SRS
Cleanup Flag: False
Update Date: 2000-04-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 706501
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 459
Comments : Not reported
Action ID: 9484
Start Date: 2000-01-28 00:00:00
Region ID: Northwestern Region
Substance Code: SRS
Cleanup Flag: False
Update Date: 2000-04-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 716919
Agency ID : Dept Of Environmental Quality
Action ID: 9425
Start Date: 1988-08-28 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 196
Comments : Not reported

Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-04-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 717976
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 26
Comments : Not reported

Action ID: 9424
Start Date: 1988-04-25 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-04-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 722842
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 196
Comments : Federal.

Action ID: 9456
Start Date: 1988-08-29 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-04-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707931
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9438
Start Date: 1998-08-20 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-08-25 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707932
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9439
Start Date: 1998-08-20 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-08-25 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709223
Agency ID : Dept Of Environmental Quality
Further Action: High
Complete Date: 256
Rank Value: 89
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9517
Start Date: 1998-02-17 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-04-08 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Admin ID:	709289	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-02-23 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1998-02-26 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		

Admin ID:	709290	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-02-23 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1998-03-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		

Admin ID:	709360	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-03-11 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1998-03-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Additional letter sent to owner William Davis. Owner's name was previously unavailable.		

Admin ID:	709362	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-03-11 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1998-03-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Additional letter sent to owner William Davis. Owner's name was previously unavailable.		

Admin ID:	709427	Action ID:	9451
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-03-12 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1998-03-25 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Comments received from Roger Florio; Union Carbide Corp.		

Admin ID:	713748	Action ID:	9421
Agency ID :	Environmental Protection Agency	Start Date:	1987-06-15 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

UNION CARBIDE CORP. (Continued)

S103841500

Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-09-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

Admin ID:	713834	Action ID:	9514
Agency ID :	Environmental Protection Agency	Start Date:	1994-04-27 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-09-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	Not reported		

DISPOSAL:

Disposal ID:	Not reported	Feature ID:	Not reported
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		

FEATURE:

Feature Id :	Not reported
Site Id :	Not reported
Feature Code :	Not reported
Relative Position :	Not reported
Hazard Rel Id :	Not reported
Region Code :	Not reported
Lat Long Method :	Not reported
Lat Long Source :	Not reported
County Code :	Not reported
Refrence Id :	Not reported
Twtnshp Coord :	Not reported
Township Zone :	Not reported
Range Coord :	Not reported
Range Zone :	Not reported
Section Coord :	Not reported
Qtr Section Coord :	Not reported
Address :	Not reported
Zip Plus :	Not reported
Lat/Long :	Not reported
Lat/Lon Decimal :	Not reported
Feature Size :	Not reported
Est Accuracy :	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNION CARBIDE CORP. (Continued)

S103841500

Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 131585
Operation Status :Inactive
Common Name : Union Carbide Corp.
Yrs of Operation : 1942 - 1981
Comments : 1942 - 1981
Updated By : sxf
Updated Date : 1997-09-05 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:195481
SIC Code: 2813
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operations SIC Id:196529
SIC Code: 3399
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operation Id : 131586
Operation Status :Active
Common Name : WMR, Incorporated
Yrs of Operation : 1997 -
Comments : 1997 -
Updated By : sxf
Updated Date : 1997-10-06 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196541
SIC Code: 6531
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR CRL:

Facility ID: 176
Location ID: 8883
Status Code: LIS
Facility Status: REMEDIAL INVESTIGATION
Lat/Long: 45.6105 / -122.7638

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

F21 NW PIPE& CASING CO. - PORTLAND
NNE 12005 N BURGARD ST.
1/2-1 PORTLAND, OR 97203
3961 ft.

SHWS - ECSI 1006866671
FINDS 110014295921

Site 2 of 3 in cluster F

Relative:
Higher

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality

Actual:
74 ft.

ECSI:

State ID Number:	138	Brown ID	Not reported
Study Area:	False	Coordinator Supplier:	gmw
Cerclis ID:	Not reported	Tax Lots:	46
Size:	25.1 acres	NPL:	False
Orphan:	False	Region ID:	2
Lat/Long:	45.6111 / -122.769	Tax Lots:	46
Township Coord.:	2.00	Township Zone:	N
Range Coord.:	1.00	Range Zone:	W
Section Coord.:	35	Qtr Section:	Not reported
Legislative :	35	Further Action:	256
FACA ID :	43706	Score Value:	85
Update Date :	2001-12-18 00:00:00	Created Date:	CONV
Created Time :	1988-08-11 00:00:00		

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121662
Code : 7440-36-0
Substance Name : ANTIMONY
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319283
Sub Alias Name : SB
Substance Alias ID : 319284
Sub Alias Name : STIBIUM
Sampling Result ID : 341005
Feature Id : Not reported
Hazard Release Id : 382334
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 11 ppm - downstream

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE & CASING CO. - PORTLAND (Continued)

1006866671

Sampling Result ID : 341006
Feature Id : Not reported
Hazard Release Id : 382334
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 8 ppm - NW Pipe (Slip mouth)
Sampling Result ID : 341007
Feature Id : Not reported
Hazard Release Id : 382334
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 9 ppm - NW Pipe (SD013)
Sampling Result ID : 341008
Feature Id : Not reported
Hazard Release Id : 382334
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 11 ppm - NW Pipe (SD014)
Sampling Result ID : 341009
Feature Id : Not reported
Hazard Release Id : 382334
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 11 ppm - NW Pipe (SD016)
Sampling Result ID : 341010
Feature Id : Not reported
Hazard Release Id : 382334
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 10 ppm - upstream (SD021)
Sampling Result ID : 341011
Feature Id : Not reported
Hazard Release Id : 382334
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 10 ppm - upstream (SD025)
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121664
Code : 7440-38-2
Substance Name : ARSENIC
Substance Abbrev. : Not reported
Substance Categ ID : 8439
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319286
Sub Alias Name : AS
Sampling Result ID : 337595
Feature Id : Not reported
Hazard Release Id : 382335
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 7 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121665
Code : 7440-39-3
Substance Name : BARIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8458
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319287
Sub Alias Name : BA
Sampling Result ID : 339077
Feature Id : Not reported
Hazard Release Id : 382336
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 198 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121668

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Code : 7440-43-9
Substance Name : CADMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8460
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319291
Sub Alias Name : CD
Sampling Result ID : 339078
Feature Id : Not reported
Hazard Release Id : 382337
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 0.8 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported.
Substance ID : 121671
Code : 7440-47-3
Substance Name : CHROMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8462
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318145
Sub Alias Name : CHROMIUM, INORGANIC
Substance Alias ID : 319294
Sub Alias Name : CHROMIUM, TOTAL
Sampling Result ID : 339079
Feature Id : Not reported
Hazard Release Id : 382338
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 50.7 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121672
Code : 7440-48-4
Substance Name : COBALT
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319295
Sub Alias Name : CO
Sampling Result ID : 339080
Feature Id : Not reported
Hazard Release Id : 382339
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 20.4 ppm - downstream
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121673
Code : 7440-50-8
Substance Name : COPPER
Substance Abbrev. : Not reported
Substance Categ ID : 8464
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319296
Sub Alias Name : CU
Sampling Result ID : 339081
Feature Id : Not reported
Hazard Release Id : 382340
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 61.5 ppm NW Pipe (Slip mouth)
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121637
Code : 7439-89-6
Substance Name : IRON
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319254
Sub Alias Name : FE
Sampling Result ID : 339082
Feature Id : Not reported
Hazard Release Id : 382341
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 48000 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121639
Code : 7439-92-1
Substance Name : LEAD
Substance Abbrev. : Not reported
Substance Categ ID : 8466
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319256

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Sub Alias Name : PB
Sampling Result ID : 339083
Feature Id : Not reported
Hazard Release Id : 382342
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 41 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121642
Code : 7439-96-5
Substance Name : MANGANESE
Substance Abbrev. : Not reported
Substance Categ ID : 8468
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319259
Sub Alias Name : MN
Sampling Result ID : 339084
Feature Id : Not reported
Hazard Release Id : 382343
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 815 - downstream
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121643
Code : 7439-97-6
Substance Name : MERCURY

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Substance Abbrev. : Not reported
Substance Categ ID : 8467
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319260
Sub Alias Name : HG
Substance Alias ID : 319261
Sub Alias Name : HYDRARGYRUM
Substance Alias ID : 319262
Sub Alias Name : LIQUID SILVER
Substance Alias ID : 319263
Sub Alias Name : QUICKSILVER
Sampling Result ID : 339085
Feature Id : Not reported
Hazard Release Id : 382344
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 0.27 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121646
Code : 7440-02-0
Substance Name : NICKEL
Substance Abbrev. : Not reported
Substance Categ ID : 8469
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319266
Sub Alias Name : NI
Sampling Result ID : 339086
Feature Id : Not reported
Hazard Release Id : 382345
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE & CASING CO. - PORTLAND (Continued)

1006866671

End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 34 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121654
Code : 7440-22-4
Substance Name : SILVER
Substance Abbrev. : Not reported
Substance Categ ID : 8470
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319274
Sub Alias Name : AG
Sampling Result ID : 339087
Feature Id : Not reported
Hazard Release Id : 382346
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 1.5 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121679
Code : 7440-66-6
Substance Name : ZINC
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319302
Sub Alias Name : ZN
Sampling Result ID : 339088
Feature Id : Not reported
Hazard Release Id : 382347
Medium Code Id : 701

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 180 ppm - NW Pipe (Slip mouth)
Sampling Result ID : 339089
Feature Id : Not reported
Hazard Release Id : 382347
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 255 ppm NW Pipe (SD013A)
Sampling Result ID : 339090
Feature Id : Not reported
Hazard Release Id : 382347
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : False
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 132 ppm NW Pipe (SD016)
Quant. Released: unknown
Date: unknown
Update Date: 1995-01-26 00:00:00
Update By: Not reported
Substance ID : 120919
Code : 11104-28-2
Substance Name : PCB 1221
Substance Abbrev. : Not reported
Substance Categ ID : 8543
Substance Sub Categ : PCB Substances for the OSPIRG Report

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316591
Sub Alias Name : AROCHLOR 1221
Substance Alias ID : 316592
Sub Alias Name : AROCLOR 1221
Sampling Result ID : 347020
Feature Id : Not reported
Hazard Release Id : 382829
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 31.00
Last Update By : kpd
Last Updated On : 1995-01-26 00:00:00
Sample Comment : up to 31 ppm
Quant. Released: unknown
Date: unknown
Update Date: 1988-11-08 00:00:00
Update By: Not reported
Substance ID : 121996
Code : ECD228
Substance Name : PETROLEUM HYDROCARBONS
Substance Abbrev. : Not reported
Substance Categ ID : 8534
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 345990
Feature Id : Not reported
Hazard Release Id : 382830
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 670.00
Last Update By : kpd
Last Updated On : 1995-01-26 00:00:00
Sample Comment : up to 670 ppm

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Quant. Released: unknown
Date: unknown
Update Date: 1988-11-08 00:00:00
Update By: Not reported
Substance ID : 121552
Code : 630-20-6
Substance Name : TETRACHLOROETHANE,1,1,1,2-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319031
Sub Alias Name : ETHANE,1,1,1,2-TETRACHLORO-
Sampling Result ID : 345190
Feature Id : Not reported
Hazard Release Id : 382831
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 12.10
Last Update By : kpd
Last Updated On : 1995-01-26 00:00:00
Sample Comment : up to 12.1 ppm

Alias Name: Northwest Pipe Company
Portland Harbor Sediment Study

Investigation Status: 208

NARR:

NARR ID: 5730225
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments (1/26/95 WHD/SRS) The site has been used for a variety of industrial purposes since at least 1937. NW Pipe & Casing (NPAC) conducted its own investigation of the property in 1989. Petroleum, chlorinated solvents, PCBs, and PAHs were found in the soil. A leaking underground storage tank had caused localized groundwater contamination. DEQ SRS agreed to review the investigation and cleanup under a voluntary agreement with NPAC. However, DEQ only provided minimal oversight, and NPAC sometimes did not follow DEQ's recommendations on how to conduct the investigation and cleanup. Approximately 1,900 cubic yards of contaminated soil were excavated and eventually disposed of off-site. The leaking underground storage tank was also removed. DEQ SRS was ultimately dissatisfied with the final cleanup report. (DEQ's LUST program signed-off on the tank removal, however.) (11/19/99 TG/SAP) Shallow river

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

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sediments along the site contained concentrations of the following contaminants that exceeded Portland Harbor Sediment baseline values: antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, nickel, manganese, zinc, butylbenzophthalate and total organotins.

1) March 1989 Dames & Moore Phase I & Phase II Property Transfer Assessment. 2) August 1989 Crosby & Overton report. 3) April 1990 Omni Environmental Groundwater Monitoring Well report. 4) DEQ NWR Hazardous Waste files. 5) DEQ NWR Water Quality file. 6) DEQ NWR Air Quality files. 7) Correspondence FROM owner and/or operator. 8) EPA Generator Notification Form. 9) Laboratory results (submitted by NW Pipe & Casing). 10) SRS Project Manager files (at Bekins). 11) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for USEPA, May 1998. 12) Northwest Pipe Company response to DEQ Site Assessment Information Request, April 9, 1999. 13) DEQ LUST Database. 14) DEQ HWIMSY Hazardous Waste Generator Database. 15) DEQ SPIN S Spill Database. 16) MetroScan Property Records, Multnomah County, Oregon. PCBs, oil, gasoline, solvents, PAHs. In adjacent Willamette River sediments: antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, nickel, manganese, zinc, butylbenzophthalate and total organotins. Contaminants spilled and/or leaked during manufacturing processes. There are reports, and some evidence, of on-site disposal. Time of release unknown. Willamette River sediments.

(1/26/95 WHD/SRS) The final site cleanup report submitted to DEQ was inadequate for a number of reasons (lack of documented QA/QC, ill-defined sampling locations, incomplete confirmation sampling). In addition, comprehensive groundwater sampling was not performed. Because of this, there is not enough information to determine if the site qualifies for listing on the Confirmed Release List (CRL) or Inventory. Site Response recommends that additional confirmation sampling be performed under the oversight of the Voluntary Cleanup Program. (6/14/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the NW Pipe Company facility has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 2, 1999. Response from NW Pipe Company was received April 19, 1999. A site screening is scheduled (level II priority). (11/19/99 TG/SAP) Strategy Recommendation completed November 1999. An Expanded Preliminary Assessment (XPA) should be conducted to evaluate sediment contamination, potential upland site contaminant sources, migration pathways and past waste-management practices. XPA is a high priority for follow-up. Note: site included in Strategy Recommendation for Schnitzer Steel Industries site - see ECSI #2355. (12/28/00 ACV/VCP) PA submitted 11/00 under 8/00 Letter Agreement. Following DEQ review, comments issued 12/21/00. Sampling data requested. (7/17/01 ACV/VCP) XPA work plan submitted, reviewed and approved. Geoprobe soil and groundwater investigations based on PA. Field investigation anticipated in August 2001. (11/1/01 ACV/VCP) Expanded Preliminary Assessment (XPA) report expected in December 2001. (ACV 4/03) NW Pipe to install groundwater monitoring wells in area of chlorinated VOC release to groundwater. VOC source investigation. NW Pipe redirected stormwater flow from Schnitzer Outfall 1 conveyance to Outfall 18. Stormwater investigation ongoing. Solvents, PCBs, PAHs, petroleum products Potential for residual soil and groundwater contamination.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

NARR ID: 5730226
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730227
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730228
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730229
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730230
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: AVOSS
Updated Date: 2003-04-11 06:58:44
NARR ID: 5730231
NARR Code : Substances of Concern
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5730232
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 131544 FACA Id : 43706
Site Name: NW Pipe & Casing Co. - Portland
County Code : 26.00
Owner Name: NW Pipe & Casing Co. - Portland
Owner Address: 12005 N Burgard ST
Portland, 97203
Lat/Long 45.6111 / -122.7691
Owner Code: SUS

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NW PIPE& CASING CO. - PORTLAND (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006866671

ADMIN ACT:

Admin ID: 704437
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 738
Comments : Not reported

Action ID: 9520
Start Date: 2001-07-15 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-07-18 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709575
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 302
Comments : Soil only.

Action ID: 9463
Start Date: 1991-09-26 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709576
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 302
Comments : Not reported

Action ID: 9448
Start Date: 1995-01-05 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 720365
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9445
Start Date: 1988-11-30 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 720457
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 302
Comments : Not reported

Action ID: 9498
Start Date: 1991-04-09 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705427
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw

Action ID: 9440
Start Date: 2000-08-01 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-01-03 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NW PIPE& CASING CO. - PORTLAND (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006866671

Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 738
Comments : Not reported

Admin ID: 705428 Action ID: 9456
Agency ID : Dept Of Environmental Quality Start Date: 2000-11-01 00:00:00
Further Action: 0 Region ID: Northwestern Region
Complete Date: 0 Substance Code: VCS
Rank Value: 0 Cleanup Flag: False
Updated By: AVOSS Update Date: 2003-04-11 06:56:42.
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 738
Comments : Not reported

Admin ID: 705926 Action ID: 9510
Agency ID : Dept Of Environmental Quality Start Date: 1999-11-15 00:00:00
Further Action: High Region ID: Northwestern Region
Complete Date: 256 Substance Code: SAS
Rank Value: 85 Cleanup Flag: False
Updated By: GWISTAR Update Date: 2003-05-15 15:24:52.
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 2157
Comments : Not reported

Admin ID: 706033 Action ID: 9426
Agency ID : Dept Of Environmental Quality Start Date: 1999-11-15 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 2000-02-10 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 2157
Comments : Strategy Recommendation - Portland Harbor Sediments

Admin ID: 721305 Action ID: 9491
Agency ID : Dept Of Environmental Quality Start Date: 1988-12-27 00:00:00
Further Action: Not reported Region ID: Headquarters
Complete Date: Not reported Substance Code: SRS
Rank Value: 0 Cleanup Flag: False
Updated By: kpd Update Date: 1998-04-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 302
Comments : Removal of contaminated soil and leaking underground tank.

Admin ID: 721670 Action ID: 9467
Agency ID : Dept Of Environmental Quality Start Date: 1991-06-20 00:00:00
Further Action: Not reported Region ID: Headquarters
Complete Date: Not reported Substance Code: SRS
Rank Value: 0 Cleanup Flag: False
Updated By: kpd Update Date: 1998-04-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 302
Comments : Not reported

Admin ID: 700251 Action ID: 9437
Agency ID : Dept Of Environmental Quality Start Date: 1991-04-09 00:00:00
Further Action: Not reported Region ID: Headquarters

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NW PIPE& CASING CO. - PORTLAND (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006866671

Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 302
Comments : Not reported

Substance Code: SRS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 700319
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 302
Comments : Not reported

Action ID: 9499
Start Date: 1991-06-19 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1998-04-13 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 722303
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 302
Comments : Not reported

Action ID: 9425
Start Date: 1991-04-08 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1995-11-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707107
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Portland Harbor Site Discovery Project.

Action ID: 9508
Start Date: 1999-06-14 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-06-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 717356
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 302
Comments : Not reported

Action ID: 9449
Start Date: 1995-01-13 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1996-01-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 717533
Agency ID : Dept Of Environmental Quality
Further Action: Low
Complete Date: 260
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 302
Comments : Not reported

Action ID: 9505
Start Date: 1995-01-26 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1997-10-07 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Admin ID:	718206	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1988-08-11 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	1804		
Comments :	Not reported		

Admin ID:	723844	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-06-20 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SRS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	302		
Comments :	Not reported		

Admin ID:	724469	Action ID:	9451
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-07-05 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	Not reported		
Comments :	From Northwest Pipe & Casing, signed by John H. Miller.		

Admin ID:	714171	Action ID:	9426
Agency ID :	Dept Of Environmental Quality	Start Date:	1995-01-26 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SRS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-04-13 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	302		
Comments :	Not reported		

Admin ID:	719230	Action ID:	9459
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-06-18 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SRS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-11-27 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	302		
Comments :	Not reported		

DISPOSAL:		Feature ID:	Not reported
Disposal ID:	Not reported		
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 131544
Operation Status :Active
Common Name : NW Pipe & Casing Co. - Portland
Yrs of Operation : 1983-Current
Comments : 1983-Current
Updated By : jmw
Updated Date : 1999-06-14 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

NW PIPE& CASING CO. - PORTLAND (Continued)

1006866671

Created By: Not reported
Created Date: Not reported

Operations SIC Id:195441
SIC Code: 3317
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:195442
SIC Code: 3479
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

F22
NNE
1/2-1
3988 ft.

JOSEPH T. RYERSON & SON, INCORPORATED
9040 N BURGARD WAY
PORTLAND, OR 97203

SHWS - ECSI 1006867118
FINDS 110014300425

Site 3 of 3 in cluster F

Relative:
Higher

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality

Actual:
74 ft.

ECSI:

State ID Number: 2441
Study Area: False
Cercdis ID: Not reported
Size: 25.21 acres
Orphan: False
Lat/Long: 45.6119 / -122.766
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 35
Legislative : 35
FACA ID : 40825
Update Date : 1999-11-16 00:00:00
Created Time : 1999-11-16 00:00:00

Brown ID Not reported
Coordinator Supplier: jmw
Tax Lots: R971350740
NPL: False
Region ID: 2
Tax Lots: R971350740
Township Zone: N
Range Zone: W
Qtr Section: DBDA
Further Action: Not reported
Score Value: 0
Created Date: jmw

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: Not reported
Update By: Not reported

Substance ID : Not reported
Code : Not reported
Substance Name : Not reported
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : Not reported
Feature Id : Not reported
Hazard Release Id : Not reported
Medium Code Id : Not reported
Substance Id : Not reported
Unit Code : Not reported
Observation : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

JOSEPH T. RYERSON & SON, INCORPORATED (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867118

Owner Operator : Not reported
Lab Data : Not reported
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : Not reported
Last Updated On : Not reported
Sample Comment : Not reported

Alias Name: Ryerson Steel
Ryerson West Business Unit 1
Investigation Status: 208

NARR:

NARR ID: 5738805
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR Comments Unknown
None (no information)
Unknown
(11/5/99 SMF/SAP) Preliminary Assessment recommended.

NARR ID: 5738806
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738807
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738808
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133642 FACA Id : 40825
Site Name: Joseph T. Ryerson & Son, Incorporated
County Code : 26.00
Owner Name: Ryerson Steel
Owner Address: 9040 N Burgard Way
Portland, 97203
Lat/Long 45.6119 / -122.7669
Owner Code: SUS

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

JOSEPH T. RYERSON & SON, INCORPORATED (Continued)

1006867118

ADMIN ACT:

Admin ID:	707704	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-11-16 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-11-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	313		
Comments :	Not reported		

Admin ID:	707710	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-11-05 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-11-16 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	707711	Action ID:	9496
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-11-05 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	gmw	Update Date:	2000-01-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

DISPOSAL:

Disposal ID:	Not reported	Feature ID:	Not reported
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		

FEATURE:

Feature Id :	Not reported
Site Id :	Not reported
Feature Code :	Not reported
Relative Position :	Not reported
Hazard Rel Id :	Not reported
Region Code :	Not reported
Lat Long Method :	Not reported
Lat Long Source :	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

JOSEPH T. RYERSON & SON, INCORPORATED (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867118

County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133642
Operation Status : Active
Common Name : Ryerson Steel
Yrs of Operation : 1990 - Present
Comments : 1990 - Present
Updated By : jmw
Updated Date : 1999-11-16 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196864
SIC Code: 5051
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

23
North
1/2-1
4044 ft.

PREMIER EDIBLE OILS
10400 N BURGARD WAY
PORTLAND, OR 97203

SHWS - ECSI S104304057
OR CRL N/A
OR VCS

Relative:
Higher

ECSI:

State ID Number: 2013
Study Area: False
Cercdis ID: Not reported
Size: 18.5 acres
Orphan: False
Lat/Long: 45.6141 / -122.782
Township Coord.: 2.00
Range Coord.: 1.00

Actual:
29 ft.

Brown ID Not reported
Coordinator Supplier: jmw
Tax Lots: 57
NPL: False
Region ID: 2
Tax Lots: 57
Township Zone: N
Range Zone: W

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PREMIER EDIBLE OILS (Continued)

S104304057

Section Coord.:	35	Qtr Section:	Not reported
Legislative :	35	Further Action:	256
FACA ID :	40518	Score Value:	87
Update Date :	2002-11-04 00:00:00	Created Date:	jmd
Created Time :	1997-03-11 00:00:00		

HAZ RELEASED:

Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121983
Code : ECD173
Substance Name : GASOLINE
Substance Abbrev. : Not reported
Substance Categ ID : 8530
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 342706
Feature Id : Not reported
Hazard Release Id : 380825
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 20 feet
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 1,500 ppm
Sampling Result ID : 342707
Feature Id : Not reported
Hazard Release Id : 380825
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 7.1 ppm
Quant. Released: unk
Date: unk

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121982
Code : ECD169
Substance Name : DIESEL - FUEL OIL
Substance Abbrev. : Not reported
Substance Categ ID : 8529
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 342708
Feature Id : Not reported
Hazard Release Id : 380826
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 20 feet
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 3,900 ppm
Sampling Result ID : 342709
Feature Id : Not reported
Hazard Release Id : 380826
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 19 ppm
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121608
Code : 71-43-2
Substance Name : BENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8502
Substance Sub Categ : Volatiles

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PREMIER EDIBLE OILS (Continued)

S104304057

Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319178
Sub Alias Name : BENZOL
Substance Alias ID : 319179
Sub Alias Name : COAL NAPHTHA
Substance Alias ID : 319180
Sub Alias Name : CYCLOHEXATRIENE
Substance Alias ID : 319181
Sub Alias Name : PHENE
Substance Alias ID : 319182
Sub Alias Name : PYROBENZOL
Sampling Result ID : 342710
Feature Id : Not reported
Hazard Release Id : 380827
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 6.8 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 120781
Code : 100-41-4
Substance Name : ETHYLBENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8515
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316146
Sub Alias Name : ETHYLBENZOL
Substance Alias ID : 316147
Sub Alias Name : PHENYLETHANE
Sampling Result ID : 342711
Feature Id : Not reported
Hazard Release Id : 380828
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 2,600 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121051
Code : 1330-20-7
Substance Name : XYLENEs
Substance Abbrev. : Not reported
Substance Categ ID : 8526
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317017
Sub Alias Name : DIMETHYLBENZENEs
Substance Alias ID : 317018
Sub Alias Name : XYLOLs
Sampling Result ID : 342712
Feature Id : Not reported
Hazard Release Id : 380829
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 3,953 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 120782
Code : 100-42-5
Substance Name : STYRENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316148
Sub Alias Name : PHENYLETHYLENE
Substance Alias ID : 316149

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PREMIER EDIBLE OILS (Continued)

S104304057

Sub Alias Name : STYROL
Substance Alias ID : 316150
Sub Alias Name : STYROLENE
Substance Alias ID : 316151
Sub Alias Name : VINYL BENZENE
Sampling Result ID : 342713
Feature Id : Not reported
Hazard Release Id : 380830
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 400 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 120819
Code : 103-65-1
Substance Name : PROPYL BENZENE, n-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316223
Sub Alias Name : BENZENE, PROPYL-
Substance Alias ID : 316224
Sub Alias Name : ISOCUMENE
Substance Alias ID : 316225
Sub Alias Name : PHENYLPROPANE, 1-
Sampling Result ID : 342714
Feature Id : Not reported
Hazard Release Id : 380831
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Sample Comment : 1,000 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121689
Code : 75-00-3
Substance Name : CHLOROETHANE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319316
Sub Alias Name : CHLORETHYL
Substance Alias ID : 319317
Sub Alias Name : CHLORIDUM
Substance Alias ID : 319318
Sub Alias Name : CHLORYL
Substance Alias ID : 319319
Sub Alias Name : ETHER HYDROCHLORIC
Substance Alias ID : 319320
Sub Alias Name : ETHER MURIATIC
Substance Alias ID : 319321
Sub Alias Name : ETHYL CHLORIDE
Substance Alias ID : 319322
Sub Alias Name : HYDROCHLORIC ETHER
Substance Alias ID : 319323
Sub Alias Name : MONOCHLOROETHANE
Substance Alias ID : 319324
Sub Alias Name : MURIATIC ETHER
Sampling Result ID : 342715
Feature Id : Not reported
Hazard Release Id : 380832
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 11.6 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121700
Code : 75-34-3
Substance Name : DICHLOROETHANE,1,1-
Substance Abbrev. : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Substance Categ ID : 8548
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319361
Sub Alias Name : ETHANE,1,1-DICHLORO-
Substance Alias ID : 319362
Sub Alias Name : ETHYLIDENE CHLORIDE
Substance Alias ID : 319363
Sub Alias Name : ETHYLIDENE DICHLORIDE
Sampling Result ID : 342716
Feature Id : Not reported
Hazard Release Id : 380833
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 3.5 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121610
Code : 71-55-6
Substance Name : TRICHLOROETHANE,1,1,1-
Substance Abbrev. : Not reported
Substance Categ ID : 8521
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8552
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318151
Sub Alias Name : TCA,1,1,1-
Substance Alias ID : 319183
Sub Alias Name : BALTANA
Substance Alias ID : 319184
Sub Alias Name : CHLOROTHENE
Substance Alias ID : 319185
Sub Alias Name : METHYLCHLOROFORM
Sampling Result ID : 342717
Feature Id : Not reported
Hazard Release Id : 380834

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 2.5 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 120878
Code : 108-67-8
Substance Name : TRIMETHYLBENZENE,1,3,5-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316454
Sub Alias Name : BENZENE,1,3,5-TRIMETHYL-
Substance Alias ID : 316455
Sub Alias Name : MESITYLENE
Substance Alias ID : 316456
Sub Alias Name : TRIMETHYLBENZENE,sym-
Substance Alias ID : 316457
Sub Alias Name : TRIMETHYLBENZOL
Sampling Result ID : 342718
Feature Id : Not reported
Hazard Release Id : 380835
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 1,200 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121912

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Code : 95-63-6
Substance Name : TRIMETHYLBENZENE,1,2,4-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317959
Sub Alias Name : BENZENE,1,2,5-TRIMETHYL-
Substance Alias ID : 317960
Sub Alias Name : CUMENE,psi-
Substance Alias ID : 317961
Sub Alias Name : PSEUDOCUMENE
Substance Alias ID : 317962
Sub Alias Name : PSEUDOCUMOL
Substance Alias ID : 317963
Sub Alias Name : TRIMETHYLBENZENE,asym-
Sampling Result ID : 342719
Feature Id : Not reported
Hazard Release Id : 380836
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 5,200 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121069
Code : 135-98-8
Substance Name : BUTYLBENZENE,sec-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317057
Sub Alias Name : BENZENE,sec-BUTYL-
Substance Alias ID : 317058
Sub Alias Name : METHYLPROPYL)BENZENE,(1-
Substance Alias ID : 317059
Sub Alias Name : PHENYLBUTANE,2-
Sampling Result ID : 342720
Feature Id : Not reported
Hazard Release Id : 380837

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 81 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 120825
Code : 104-51-8
Substance Name : BUTYLBENZENE,n-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316239
Sub Alias Name : BENZENE,BUTYL-
Substance Alias ID : 316240
Sub Alias Name : PHENYLBUTANE,1-
Sampling Result ID : 342721
Feature Id : Not reported
Hazard Release Id : 380838
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 220 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121956
Code : 99-87-6
Substance Name : ISOPROPYLTOLUENE,p-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318126
Sub Alias Name : BENZENE,1-ISOPROPYL-4-METHYL-
Substance Alias ID : 318127
Sub Alias Name : CUMENE,p-METHYL-
Substance Alias ID : 318128
Sub Alias Name : CYMENE
Substance Alias ID : 318129
Sub Alias Name : CYMENE,p-
Substance Alias ID : 318130
Sub Alias Name : CYMOL
Substance Alias ID : 318131
Sub Alias Name : DOLCYMENE
Substance Alias ID : 318132
Sub Alias Name : ISOPROPYL-1-METHYLBENZENE,4-
Substance Alias ID : 318133
Sub Alias Name : PARACYMENE
Sampling Result ID : 342722
Feature Id : Not reported
Hazard Release Id : 380839
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2002-11-04 00:00:00
Sample Comment : 350 ppb
Quant. Released: unk
Date: unk
Update Date: 1997-03-13 00:00:00
Update By: Not reported
Substance ID : 121868
Code : 91-20-3
Substance Name : NAPHTHALENE
Substance Abbrev. : Not reported
Substance Categ ID : 8494
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317793
Sub Alias Name : MOTH BALLS
Substance Alias ID : 317794
Sub Alias Name : NAPHTHENE
Substance Alias ID : 317795
Sub Alias Name : TAR CAMPHOR
Sampling Result ID : 342723

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Feature Id : Not reported
Hazard Release Id : 380840
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-11-23 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-13 00:00:00
Sample Comment : 1,900 ppb

Alias Name: C & T Quincy Foods (SEE ECSI 2355)
Portland Harbor Sediment Study
Schnitzer Investment Corp.

Investigation Status: 207

NARR:

NARR ID: 5736683
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments Property owner submitted an 11/96 Phase II ESA to DEQ in February 1997, which documented groundwater contamination at this site. Primary contaminants included petroleum hydrocarbons, particularly BTEX and other petroleum-based VOCs. Several well points also contained low levels of chlorinated solvents. The property owner and operator concluded that the contamination originated from the adjacent Time Oil site (ECSI #170). (6/17/99 JMW/SAP) Weston sampling results from the Portland Harbor Sediment Study revealed mercury, cobalt, antimony, barium, PAHs, zinc, copper, manganese, arsenic, carbazole, dibenzofuran, methylnaphthalene, and bis(2-ethylhexyl)phthalate in river sediments adjacent to the site. DEQ has not determined the source(s) of these contaminants. (1/4/02 ACV/VCP) Results of investigation activities conducted through 2001 indicate groundwater impacts in several different locations on the site. Free-phase petroleum is present on groundwater at the southwest corner of the site and appears to be from historic site operations. Low-level chlorinated solvents, PAHs, and VOCs usually associated with gasoline were detected with the free-phase petroleum. This contaminated groundwater plume appears to be distinct from impacted groundwater toward the northeast part of the property. Activities on adjacent Time Oil property may have contributed to groundwater contamination in northeast part of property. Further groundwater investigation is planned in 2002 to more fully characterize groundwater conditions. 1996 Phase I and Phase II ESAs documenting the presence of petroleum hydrocarbons and chlorinated solvents in groundwater and petroleum in soils; EPA, 1998, Portland Harbor Sediment Investigation Report; September 1998 Focused Site Characterization;

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PREMIER EDIBLE OILS (Continued)

S104304057

September 2001 Preliminary RI; April 2002 Bell Terminal Geoprobe Investigation; Quarterly groundwater Monitoring Data from On-Site Wells, With Results Through October 2001.
Petroleum hydrocarbons, BTEX, PAHs, and VOCs, including chlorinated solvents, on-site. In adjacent river sediments: mercury, cobalt, antimony, barium, PAHs, copper, zinc, manganese, arsenic, carbazole, dibenzofuran, methylnaphthalene, and bis(2-ethylhexyl)phthalate.
(6/17/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the C & T Quincy Foods/Premier Edible Oils (PEO) site has been identified as a potential source of contamination to the Portland Harbor. DEQ sent a Site Assessment review notice to C&T Quincy Foods 3/2/99, but has received no response. A site screening is scheduled (level II priority). (2/1/00 JMW/SAP) PEO information combined with the Schnitzer Investment Corporation (SIC) Strategy Recommendation - SEE EC
SI #2355. (9/1/00 ACV/VCP) DEQ is reviewing site investigation information conducted by Schnitzer. (12/21/00 ACV/VCP) DEQ issued a file review memo summarizing additional information submitted by PEO, SIC, and Time Oil on December 21, 2000. DEQ proposed that SIC, as the property owner, take over the remedial investigation for PEO. (7/17/01 ACV/VCP) Negotiations for formal agreement started in March 2001. Soil and groundwater investigation running concurrent with negotiations.
Free-phase petroleum discovered at two locations on-site. (11/1/01 ACV/VCP) SIC conducted off-site groundwater investigation, on upgradient/adjacent Bell Terminal (Time Oil) property in September 2001. Preliminary results anticipated in December 2001. (1/4/02 ACV/VCP) New groundwater data confirms contamination from historic operations in the southwestern portion of the site. Premier Edible Oils should be added to the Confirmed Release List. (4/03 ACV) Groundwater RI to be completed in early 2003. Risk assessment work plan anticipated in 5/03.

NARR ID: 5736684
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736685
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736686
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: AVOSS
Updated Date: 2003-04-10 15:31:27

ECWQ:

Owner Site Num: 133285
Site Name: Premier Edible Oils
County Code : 26.00
Owner Name: American Metallic Chemicals
Owner Address: 10400 N Burgard Way

FACA Id : 40518

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

PREMIER EDIBLE OILS (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104304057

Portland, 97203
Lat/Long 45.6141 / -122.7827
Owner Code: LIS
Owner Site Num: 133286
Site Name: Premier Edible Oils
County Code : 26.00
Owner Name: C & T Quincy Foods of Portland
Owner Address: 10400 N Burgard Way

FACA Id : 40518

Portland, 97203
Lat/Long 45.6141 / -122.7827
Owner Code: LIS
Owner Site Num: 133287
Site Name: Premier Edible Oils
County Code : 26.00
Owner Name: Northwest Oil Company
Owner Address: 10400 N Burgard Way

FACA Id : 40518

Portland, 97203
Lat/Long 45.6141 / -122.7827
Owner Code: LIS
Owner Site Num: 133288
Site Name: Premier Edible Oils
County Code : 26.00
Owner Name: Oregon Shipbuilding
Owner Address: 10400 N Burgard Way

FACA Id : 40518

Portland, 97203
Lat/Long 45.6141 / -122.7827
Owner Code: LIS
Owner Site Num: 133289
Site Name: Premier Edible Oils
County Code : 26.00
Owner Name: Premier Edible Oils Corporation
Owner Address: 10400 N Burgard Way

FACA Id : 40518

Portland, 97203
Lat/Long 45.6141 / -122.7827
Owner Code: LIS

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 704458
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: AVOSS
Created By: Not reported
Employee Id: 738
Comments : Not reported

Action ID: 9442
Start Date: 2001-03-06 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-04-29 07:51:14.
Create Date: 2002-12-17 08:50:22.

Admin ID: 704459
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw

Action ID: 9484
Start Date: 2001-03-06 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-07-23 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

PREMIER EDIBLE OILS (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104304057

Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	738		
Comments :	Not reported		
Admin ID:	705426	Action ID:	9440
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-12-01 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2001-01-03 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	738		
Comments :	Not reported		
Admin ID:	710442	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-03-11 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-06-17 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		
Admin ID:	700994	Action ID:	9438
Agency ID :	Dept Of Environmental Quality	Start Date:	2002-03-29 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	2002-04-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		
Admin ID:	711747	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-03-11 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmd	Update Date:	1997-03-11 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		
Admin ID:	707121	Action ID:	9508
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-06-17 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2000-02-01 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Combined with Schnitzer Steel Strategy Recommendation - SEE ECSI 2355.		
Admin ID:	702930	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	2002-01-04 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 738
Comments : Not reported

Substance Code: VCS
Cleanup Flag: False
Update Date: 2002-01-07 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 703027
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9465
Start Date: 2002-01-08 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2002-01-14 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twtnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133285
Operation Status :Inactive
Common Name : American Metallic Chemicals
Yrs of Operation : 1950's
Comments : 1950's
Updated By : jmw
Updated Date : 2002-11-04 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:Not reported
SIC Code: Not reported
Created By: Not reported
Created Date: Not reported

Operation Id : 133286
Operation Status :Inactive
Common Name : C & T Quincy Foods of Portland
Yrs of Operation : January 1997 - May 1998
Comments : January 1997 - May 1998
Updated By : jmw
Updated Date : 2002-11-04 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196809
SIC Code: 2079
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operation Id : 133287

Operation Status :Inactive
Common Name : Northwest Oil Company
Yrs of Operation : February 1941 - December 1943
Comments : February 1941 - December 1943
Updated By : jmw
Updated Date : 2002-11-04 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

PREMIER EDIBLE OILS (Continued)

S104304057

Operations SIC Id: Not reported
SIC Code: Not reported
Created By: Not reported
Created Date: Not reported
Operation Id : 133288
Operation Status : Inactive
Common Name : Oregon Shipbuilding
Yrs of Operation : December 1943 - 1945
Comments : December 1943 - 1945
Updated By : jmw
Updated Date : 2002-11-04 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: Not reported
SIC Code: Not reported
Created By: Not reported
Created Date: Not reported
Operation Id : 133289
Operation Status : Inactive
Common Name : Premier Edible Oils Corporation
Yrs of Operation : 1973 - January 1997
Comments : 1973 - January 1997
Updated By : jmw
Updated Date : 2002-11-04 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196810
SIC Code: 2079
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR CRL:

Facility ID: 2013
Location ID: 40518
Status Code: LIS
Facility Status: REMEDIAL INVESTIGATION
Lat/Long: 45.6141 / -122.7827

OR VCS:

ECS Site ID: 2013
Action: RI
Start Date: 03/06/20
End Date: Not reported
Program: VCS
CRL: LIS
Facility Size: 18.5 acres
Project Manager Last Name: Voss
Project Manager First Name: Alicia

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

24
NNE
1/2-1
4169 ft.

JEFFERSON SMURFIT
9930 N BURGARD WAY
PORTLAND, OR 97203

SHWS - ECSI
OR VCS

S103997154
N/A

Relative:
Higher

ECSI:

State ID Number: 2371
Study Area: False
Cerclis ID: Not reported
Size: 9.53 acres
Orphan: False
Lat/Long: 45.6144 / -122.769
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 35
Legislative : 35
FACA ID : 43709
Update Date : 2003-05-15 16:01:26.
Created Time : 1999-06-11 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: 33
NPL: False
Region ID: 2
Tax Lots: 33
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 0
Score Value: Not reported
Created Date: jmw

Actual:
30 ft.

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-21 00:00:00
Update By: Not reported
Substance ID : 121662
Code : 7440-36-0
Substance Name : ANTIMONY
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319283
Sub Alias Name : SB
Substance Alias ID : 319284
Sub Alias Name : STIBIUM
Sampling Result ID : 340990
Feature Id : Not reported
Hazard Release Id : 382324
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 9 ppm - downstream
Sampling Result ID : 340991
Feature Id : Not reported
Hazard Release Id : 382324
Medium Code Id : 701
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

JEFFERSON SMURFIT (Continued)

S103997154

Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 11 ppm - JSC
Sampling Result ID : 340992
Feature Id : Not reported
Hazard Release Id : 382324
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 8 ppm - JSC (Slip mouth)
Sampling Result ID : 340993
Feature Id : Not reported
Hazard Release Id : 382324
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 459 ppm - upstream
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-21 00:00:00
Update By: Not reported
Substance ID : 121643
Code : 7439-97-6
Substance Name : MERCURY
Substance Abbrev. : Not reported
Substance Categ ID : 8467
Substance Sub Categ : Inorganics
Category Level : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

JEFFERSON SMURFIT (Continued)

S103997154

Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319260
Sub Alias Name : HG
Substance Alias ID : 319261
Sub Alias Name : HYDRARGYRUM
Substance Alias ID : 319262
Sub Alias Name : LIQUID SILVER
Substance Alias ID : 319263
Sub Alias Name : QUICKSILVER
Sampling Result ID : 340994
Feature Id : Not reported
Hazard Release Id : 382325
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 0.27 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-21 00:00:00
Update By: Not reported
Substance ID : 121679
Code : 7440-66-6
Substance Name : ZINC
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319302
Sub Alias Name : ZN
Sampling Result ID : 340995
Feature Id : Not reported
Hazard Release Id : 382326
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JEFFERSON SMURFIT (Continued)

S103997154

Last Updated On : 1999-12-21 00:00:00
Sample Comment : 18 ppm - JSC (Slip mouth)
Sampling Result ID : 340996
Feature Id : Not reported
Hazard Release Id : 382326
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 225 ppm - upstream
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-21 00:00:00
Update By: Not reported
Substance ID : 121045
Code : 132-64-9
Substance Name : DIBENZOFURAN
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316997
Sub Alias Name : DIPHENYLENE OXIDE
Sampling Result ID : 340997
Feature Id : Not reported
Hazard Release Id : 382327
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 240 ppb - upstream
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-21 00:00:00
Update By: Not reported
Substance ID : 122002
Code : ECD243

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

JEFFERSON SMURFIT (Continued)

S103997154

Substance Name : POLYAROMATIC HYDROCARBONS (PAH)
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318143
Sub Alias Name : PAH
Substance Alias ID : 318148
Sub Alias Name : POLYCYCLIC AROMATIC HYDROCARBONS (PAH)
Substance Alias ID : 318149
Sub Alias Name : POLYNUCLEAR AROMATIC HYDROCARBINS (PNA)
Substance Alias ID : 318150
Sub Alias Name : PNA
Sampling Result ID : 340998
Feature Id : Not reported
Hazard Release Id : 382328
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : LPAHs - 5504 ppb
Sampling Result ID : 340999
Feature Id : Not reported
Hazard Release Id : 382328
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : HPAHs - 10660 ppb
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-21 00:00:00
Update By: Not reported
Substance ID : 122031
Code : ECD312
Substance Name : TRIBUTYLTIN
Substance Abbrev. : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

JEFFERSON SMURFIT (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103997154

Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 341000
Feature Id : Not reported
Hazard Release Id : 382329
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-21 00:00:00
Sample Comment : 90 ppb (organotins)

Alias Name: Burgard Industrial Park
Investigation Status: 208

NARR:

NARR ID: 5738412
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments Antimony, zinc and total organotins were encountered in sediment in the vicinity of the site at concentrations more than 50 percent above baseline values.
1) Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for USEPA, May 1998. 2) Jefferson Smurfit Corporation response to DEQ Site Assessment Information Request, March 17, 1999. 3) Decommissioning of an Above Ground Storage Tank and Excavation of Affected Soils, prepared by Parsons Engineering Science, Inc. for Jefferson Smurfit Corp., October 1997. 4) DEQ LUST Database. 5) DEQ HWIMS Hazardous Waste Generator Database. 6) DEQ SPINS Spill Database. 7) MetroScan Property Records, Multnomah County, Oregon.
Total organotins, copper, zinc, mercury, and antimony found in adjacent Willamette River sediments.
Willamette River sediments.
(6/11/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Jefferson Smurfit facility has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 2, 1999. Response from Jefferson Smurfit was received March 22, 1999. A site screening is scheduled (level II priority). (12/21/99 TBG/SAP) Strategy Recommendation completed November 1999. An expanded Preliminary Assessment (XPA) on the Jefferson Smurfit site should be conducted to evaluate sediment contamination, potential

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JEFFERSON SMURFIT (Continued)

S103997154

upland site contaminant sources, migration pathways, and past waste-management practices, and to determine sources of observed sediment contamination. XPA is a high priority for follow-up. (4/10/03 ACV) Smurfit conducted an XPA under a Portland Harbor agreement. DEQ agreed with XPA conclusions that there did not appear to be any significant current sources of contamination to the river. DEQ submitted recommendations to EPA in 2002 for no further uplands investigation. EPA has not formally responded.

NARR ID: 5738413
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738414
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738415
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738416
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: GWISTAR
Updated Date: 2003-10-22 15:38:44

ECWQ:

Owner Site Num: 133573
Site Name: Jefferson Smurfit
County Code : 26.00
Owner Name: Jefferson Smurfit
Owner Address: 9930 N Burgard Way
Portland, 97203
Lat/Long 45.6144 / -122.7694
Owner Code: SUS

FACA Id : 43709

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 725814
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: GWISTAR
Created By: AVOSS
Employee Id: 738
Comments : Not reported

Action ID: 9520
Start Date: 2001-04-10 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-05-15 16:01:10.
Create Date: 2003-04-10 15:53:44.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JEFFERSON SMURFIT (Continued)

S103997154

Admin ID: 705927
Agency ID : Dept Of Environmental Quality
Further Action: High
Complete Date: 256
Rank Value: 82
Updated By: GWISTAR
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Action ID: 9510
Start Date: 1999-11-15 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2003-05-15 16:00:25.
Create Date: 2002-12-17 08:50:22.

Admin ID: 705928
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Action ID: 9425
Start Date: 1999-11-15 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-02-01 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707095
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 313
Comments : Not reported

Action ID: 9424
Start Date: 1999-06-11 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1999-06-11 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707096
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9508
Start Date: 1999-06-11 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-06-11 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

JEFFERSON SMURFIT (Continued)

S103997154

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133573
Operation Status :Active
Common Name : Jefferson Smurfit
Yrs of Operation : unknown - Current
Comments : unknown - Current
Updated By : jmw
Updated Date : 1999-06-11 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196802
SIC Code: 2600
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 2371
Action: XPA
Start Date: 04/10/20
End Date: 10-Jan-0

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

JEFFERSON SMURFIT (Continued)

S103997154

Program: VCS
CRL: SUS
Facility Size: 9.53 acres
Project Manager Last Name: Voss
Project Manager First Name: Alicia

25
NNE
1/2-1
4353 ft.

PORTLAND CONTAINER REPAIR CORPORATION
9449 N BURGARD WAY
PORTLAND, OR 97203

SHWS - ECSI 1006868279
FINDS 110014312270

Relative:
Higher

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality

Actual:
35 ft.

ECSI:

State ID Number: 2375
Study Area: False
Cercis ID: Not reported
Size: Approx. 18.5 acres
Orphan: False
Lat/Long: 45.6105 / -122.766
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 35
Legislative : 35
FACA ID : 14778
Update Date : 2004-01-14 12:23:40.
Created Time : 1999-06-15 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: 4,5,6,7, 8
NPL: False
Region ID: 2
Tax Lots: 4,5,6,7, 8
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 256
Score Value: 87
Created Date: jmw

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: Not reported
Update By: Not reported

Substance ID : Not reported
Code : Not reported
Substance Name : Not reported
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : Not reported
Feature Id : Not reported
Hazard Release Id : Not reported
Medium Code Id : Not reported
Substance Id : Not reported
Unit Code : Not reported
Observation : Not reported
Owner Operator : Not reported
Lab Data : Not reported
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported

PORTLAND CONTAINER REPAIR CORPORATION (Continued)

1006868279

Last Update By :	Not reported
Last Updated On :	Not reported
Sample Comment :	Not reported

Alias Name: Burgard Industrial Park
Portland Harbor Sediment Study
Schnitzer Investment Corp. SEE ECSI 2355

Investigation Status: 208

NARR:

NARR ID: 5738430
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments: Weston sampling results from the Portland Harbor Sediment Study revealed total organotins, copper, zinc, and antimony in river sediments adjacent to the site. Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for US EPA, 5/98.

Willamette River sediments.

(6/15/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Portland Container Repair facility has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 2, 1999. A response from the Portland Container Repair Corp was received on March 22, 1999. A site screening is scheduled (level II priority).

(2/1/00 JMW/SAP) Site information combined in Schnitzer Steel Strategy Recommendation - SEE EC SI #2355.

NARR ID: 5738431
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738432
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738433
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num:	133577	FACA Id :	14778
Site Name:	Portland Container Repair Corp.		
County Code :	26.00		
Owner Name:	Portland Container Repair Corp.		
Owner Address:	9449 N Burgard Way Portland, 97203		
Lat/Long	45.6105 / -122.7667		
Owner Code:	SUS		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PORTLAND CONTAINER REPAIR CORPORATION (Continued)

1006868279

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 705443
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 738
Comments: Combined with Schnitzer Steel - see ECSI #2355.

Action ID: 9484
Start Date: 2000-03-02 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2001-01-04 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707117
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 313
Comments: Not reported

Action ID: 9424
Start Date: 1999-06-15 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1999-06-15 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707118
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments: Combined with Schnitzer Steel Strategy Recommendation SEE ECSI #2355.

Action ID: 9508
Start Date: 1999-06-15 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-02-01 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium: Not reported
Treatment: Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth: Not reported
Monitor: Not reported
Manifest Num: Not reported
Removed By: Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id: Not reported
Site Id: Not reported
Feature Code: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

PORTLAND CONTAINER REPAIR CORPORATION (Continued)

1006868279

Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133577
Operation Status :Active
Common Name : Portland Container Repair Corp.
Yrs of Operation : 1995 - Current
Comments : 1995 - Current
Updated By : jmw
Updated Date : 1999-06-15 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196807
SIC Code: 8990
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

26
South
1/2-1
4609 ft.

FOSS MARITIME CO
9030 NW ST HELENS RD
PORTLAND, OR 97231

RCRIS-SQG
SHWS - ECSI
FINDS
HSIS
OR CRL
OR VCS

1004770118
ORD103014866

Relative:
Higher

Actual:
90 ft.

RCRIS:
Owner: BRIX MARITIME CO DBA FOSS MARITIME CO
(503) 286-0631
EPA ID: ORD103014866
Contact: RAFAEL CABALLERO
(503) 286-0631
Classification: Conditionally Exempt Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality
Resource Conservation and Recovery Act Information system

ECSI:

State ID Number:	2364	Brown ID	0
Study Area:	False	Coordinator Supplier:	KVANPAT
Cerclis ID:	Not reported	Tax Lots:	Not reported
Size:	4.46 acres	NPL:	False
Orphan:	False	Region ID:	2
Lat/Long:	45.5877 / -122.771	Tax Lots:	Not reported
Township Coord.:	1.00	Township Zone:	N
Range Coord.:	1.00	Range Zone:	W
Section Coord.:	11	Qtr Section:	Not reported
Legislative :	11	Further Action:	256
FACA ID :	470	Score Value:	83
Update Date :	2003-05-01 09:57:56.	Created Date:	jmw
Created Time :	1999-06-08 00:00:00		

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: 2001-11-27 00:00:00
Update By: Not reported
Substance ID : 121868
Code : 91-20-3
Substance Name : NAPHTHALENE
Substance Abbrev. : Not reported
Substance Categ ID : 8494
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317793
Sub Alias Name : MOTH BALLS
Substance Alias ID : 317794
Sub Alias Name : NAPHTHENE
Substance Alias ID : 317795
Sub Alias Name : TAR CAMPHOR
Sampling Result ID : 338930

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Feature Id : Not reported
Hazard Release Id : 380092
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2001-11-27 00:00:00
Sample Comment : 11.1 ppm
Sampling Result ID : 338931
Feature Id : Not reported
Hazard Release Id : 380092
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2001-11-27 00:00:00
Sample Comment : 65.1 ppb
Quant. Released: Not reported
Date: Not reported
Update Date: 2001-11-27 00:00:00
Update By: Not reported
Substance ID : 122012
Code : ECD275
Substance Name : TOTAL PETROLEUM HYDROCARBONS (TPH)
Substance Abbrev. : Not reported
Substance Categ ID : 8540
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 338932
Feature Id : Not reported
Hazard Release Id : 380093
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Sample Depth : Not reported
Start Date : 1993-01-26 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2001-11-27 00:00:00
Sample Comment : Up to 53,400 ppm
Quant. Released: Not reported
Date: Not reported
Update Date: 2001-11-27 00:00:00
Update By: Not reported
Substance ID : 121608
Code : 71-43-2
Substance Name : BENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8502
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319178
Sub Alias Name : BENZOL
Substance Alias ID : 319179
Sub Alias Name : COAL NAPTHA
Substance Alias ID : 319180
Sub Alias Name : CYCLOHEXATRIENE
Substance Alias ID : 319181
Sub Alias Name : PHENE
Substance Alias ID : 319182
Sub Alias Name : PYROBENZOL
Sampling Result ID : 338933
Feature Id : Not reported
Hazard Release Id : 380094
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2001-11-27 00:00:00
Sample Comment : 5.2 ppm
Sampling Result ID : 338934
Feature Id : Not reported
Hazard Release Id : 380094
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Sample Depth : Not reported
Start Date : 2001-05-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2001-11-27 00:00:00
Sample Comment : 125 ppb
Quant. Released: Not reported
Date: Not reported
Update Date: 2001-11-27 00:00:00
Update By: Not reported
Substance ID : 121051
Code : 1330-20-7
Substance Name : XYLENEs
Substance Abbrev. : Not reported
Substance Categ ID : 8526
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317017
Sub Alias Name : DIMETHYLBENZENEs
Substance Alias ID : 317018
Sub Alias Name : XYLOLs
Sampling Result ID : 338935
Feature Id : Not reported
Hazard Release Id : 380095
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2001-11-27 00:00:00
Sample Comment : 134.9 ppm
Sampling Result ID : 338936
Feature Id : Not reported
Hazard Release Id : 380095
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Last Updated On : 2001-11-27 00:00:00
Sample Comment : 420.4 ppb
Quant. Released: Not reported
Date: Not reported
Update Date: 2001-11-27 00:00:00
Update By: Not reported
Substance ID : 121912
Code : 95-63-6
Substance Name : TRIMETHYLBENZENE,1,2,4-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317959
Sub Alias Name : BENZENE,1,2,5-TRIMETHYL-
Substance Alias ID : 317960
Sub Alias Name : CUMENE,psi-
Substance Alias ID : 317961
Sub Alias Name : PSEUDOCUMENE
Substance Alias ID : 317962
Sub Alias Name : PSEUDOCUMOL
Substance Alias ID : 317963
Sub Alias Name : TRIMETHYLBENZENE,asym-
Sampling Result ID : 338937
Feature Id : Not reported
Hazard Release Id : 380096
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2001-11-27 00:00:00
Sample Comment : 59.8 ppm
Sampling Result ID : 338938
Feature Id : Not reported
Hazard Release Id : 380096
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Last Updated On : 2001-11-27 00:00:00
Sample Comment : 627 ppb
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 121826
Code : 85-68-7
Substance Name : BUTYL BENZYL PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317652
Sub Alias Name : BENZYL-n-BUTYL PHTHALATE
Substance Alias ID : 317653
Sub Alias Name : PHTHALIC ACID, BENZYL BUTYL ESTER
Sampling Result ID : 341002
Feature Id : Not reported
Hazard Release Id : 382332
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : 29 ppb - downstream
Quant. Released: Not reported
Date: Not reported
Update Date: 1999-12-22 00:00:00
Update By: Not reported
Substance ID : 122002
Code : ECD243
Substance Name : POLYAROMATIC HYDROCARBONS (PAH)
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318143
Sub Alias Name : PAH
Substance Alias ID : 318148
Sub Alias Name : POLYCYCLIC AROMATIC HYDROCARBONS (PAH)
Substance Alias ID : 318149
Sub Alias Name : POLYNUCLEAR AROMATIC HYDROCARBINS (PNA)
Substance Alias ID : 318150
Sub Alias Name : PNA

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Sampling Result ID : 338929
Feature Id : 0
Hazard Release Id : 382333
Medium Code Id : 698
Substance Id : 0
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2001-05-29 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : GWISTAR
Last Updated On : 2003-04-23 13:50:41.
Sample Comment : 7.445 ppb
Sampling Result ID : 341003
Feature Id : Not reported
Hazard Release Id : 382333
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : LPAH 803 ppb - downstream
Sampling Result ID : 341004
Feature Id : Not reported
Hazard Release Id : 382333
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1997-09-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-12-22 00:00:00
Sample Comment : HPAHs 3907 ppb - downstream
Alias Name: Brix Maritime
Portland Harbor Sediment Study
Knappton Corp.

Investigation Status: 207

NARR:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

FOSS MARITIME CO (Continued)

1004770118

NARR ID: 5738375
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: JWAGGY
Updated Date: 2002-12-30 15:39:16

NARR Comments Weston sampling results from the Portland Harbor Sediment Study revealed PAHs, thallium and butylbenzylphthalate in river sediments adjacent to the site. (11/20/01 RGS/VCP) Soil and groundwater sampling performed during the Preliminary Assessment indicated the presence of TPH, benzene, ethylbenzene, xylenes, naphthalene, PAHs, and 1,2,4-trimethylbenzene on-site. (12/23/02 RGS/VCP) A pre-remedial investigation was initiated in summer 2002. The monitoring wells were installed. NAPL was observed in one well. Additional wells will be installed.

1) See also Spill files: 95-145, 95-486, 95-1175, 96-222, 96-1679, 96-1403, 97-201, 97-1857, 97-2378, 97-2489, 98-67, 98-75, 98-622, 98-2225, 98-3142. 2) Portland Harbor Sediment Investigation Report, prepared by Roy Weston, Inc. for USEPA, May 1998

3) Foss Maritime Company's response to DEQ Site Assessment Information Request, March 31, 1999; 4) DEQ LUST Database; DEQ HWIMSY Hazardous Waste Generator Database; DEQ SPINS Spill Database; MetroScan Property Records, Multnomah County, Oregon. 5) "Supplemental Preliminary Assessment Summary Report", Anchor, October 2000; 6) "Work Plan for UST Investigation", Hahn and Associates, May 2001; 7) "Sampling Results Report in Support of the Preliminary Assessment", Anchor, September 2001; 8) DEQ project files

On-site soil and groundwater; Willamette River sediments. (6/8/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Foss Maritime facility has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent 3/3/99. Response from Foss Maritime received 4/12/99. A site screening is scheduled (level III priority). (12/21/99 TG/SAP) Strategy Recommendation completed November 1999. An expanded Preliminary Assessment (XPA) at Foss Maritime should be conducted to evaluate sediment contamination, potential upland site contaminant sources and past waste-management practices, and to determine the extent and source(s) of observed sediment contamination at sample station SD052. An XPA is a high priority for follow-up. (4/2/01 RGS/VCP) DEQ has reviewed and commented on the Preliminary Assessment report provided by Foss. DEQ requested a focused sampling investigation. (11/21/01 RGS/VCP) Brix submitted and implemented a work plan for investigating contamination around the current and former USTs. This work occurred with no DEQ oversight. In June 2001, DEQ and Brix representatives met to discuss the results of the UST investigation, which indicated that soil and groundwater had been impacted. DEQ identified several data gaps based on this preliminary review. In September 2001, Brix submitted a report documenting the findings of the UST investigation. DEQ determined further action is needed and recommended a Pre-RI under the Portland Harbor Agreement. (12/23/02 RGS/VCP) A Voluntary Agreement for the RI was signed in May, 2002. RI activities began in May and are on-going. Petroleum contamination documented on-site could threaten on-site workers, as well as ecological receptors in the adjacent Willamette River.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

FOSS MARITIME CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1004770118

NARR ID: 5738376
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: GWISTAR
Updated Date: 2003-01-08 11:03:23
NARR ID: 5738377
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738378
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: JWAGGY
Updated Date: 2002-12-30 15:41:12
NARR ID: 5742859
NARR Code : Health Threats
Created By: GWISTAR
Create Date: 2003-01-08 11:05:11
Updated By: GWISTAR
Updated Date: 2003-01-08 11:05:11

ECWQ:

Owner Site Num: 133566
Site Name: Foss Maritime/Brix Maritime
County Code : 26.00
Owner Name: Foss Maritime Company
Owner Address: 9030 NW St. Helens Rd
Portland, 97231
Lat/Long 45.5877 / -122.7713
Owner Code: LIS

FACA Id : 470

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 704698
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 223
Comments : Not reported

Action ID: 9440
Start Date: 1999-11-25 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2000-07-31 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705008
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: Sampling R
Created By: jmw
Employee Id: Not reported

Action ID: 9520
Start Date: 2000-02-15 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: dated 9/01.
Create Date: 2001-11-27 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

FOSS MARITIME CO (Continued)

1004770118

Comments : Not reported

Admin ID: 726027
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: KVANPAT
Created By: KVANPAT
Employee Id: 730
Comments : Not reported

Action ID: 9438
Start Date: 2003-04-29 00:00:00
Region ID: Northwestern Region
Substance Code: vcs
Cleanup Flag: False
Update Date: 2003-05-01 09:57:20.
Create Date: 2003-05-01 09:57:20.

Admin ID: 726028
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: KVANPAT
Created By: KVANPAT
Employee Id: 730
Comments : Not reported

Action ID: 9439
Start Date: 2003-04-29 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-05-01 09:57:45.
Create Date: 2003-05-01 09:57:45.

Admin ID: 705665
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Action ID: 9425
Start Date: 1999-11-19 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-12-22 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705666
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Action ID: 9449
Start Date: 1999-11-19 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-12-22 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 700484
Agency ID : Dept Of Environmental Quality
Further Action: High
Complete Date: 256
Rank Value: 83
Updated By: GWISTAR
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Action ID: 9510
Start Date: 1999-11-19 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-05-15 15:54:55.
Create Date: 2002-12-17 08:50:22.

Admin ID: 701939
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0

Action ID: 9498
Start Date: 2002-10-03 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

FOSS MARITIME CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1004770118

Updated By: gmw
Created By: Not reported
Employee Id: 705
Comments : Not reported

Update Date: 2002-10-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707076
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 313
Comments : Not reported

Action ID: 9424
Start Date: 1999-06-08 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1999-06-08 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707077
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9508
Start Date: 1999-06-08 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-06-08 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 702661
Agency ID : Dept Of Environmental Quality
Further Action: High
Complete Date: 256
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 705
Comments : Additional investigation needed to determine if pathway to river complete and poses an unacceptable risk.

Action ID: 9502
Start Date: 2001-11-21 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2002-10-03 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 702662
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: RSTRUCK
Created By: Not reported
Employee Id: 705
Comments : PH Agreement

Action ID: 9442
Start Date: 2001-11-21 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-05-01 10:52:36.
Create Date: 2002-12-17 08:50:22.

Admin ID: 724978
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: KVANPAT
Created By: KVANPAT
Employee Id: 705
Comments : Not reported

Action ID: 9499
Start Date: 2002-10-03 00:00:00
Region ID: Northwestern Region
Substance Code: Not reported
Cleanup Flag: False
Update Date: 2002-12-20 09:35:33.
Create Date: 2002-12-20 09:35:33.

Admin ID: 725032

Action ID: 9412

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: RSTRUCK
Created By: JWAGGY
Employee Id: 705
Comments : Voluntary Agreement for Remedial Investigation and Souce Control Measures.

Start Date: 2002-05-08 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-05-01 10:51:44.
Create Date: 2002-12-30 15:42:47.

Admin ID: 725033
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: RSTRUCK
Created By: JWAGGY
Employee Id: 2362
Comments : Not reported

Action ID: 9484
Start Date: 2002-05-08 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-05-01 10:53:13.
Create Date: 2002-12-30 15:43:41.

Admin ID: 725332
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: KVANPAT
Created By: KVANPAT
Employee Id: 730
Comments : Not reported

Action ID: 9465
Start Date: 2003-02-20 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-02-20 13:09:07.
Create Date: 2003-02-20 13:09:07.

Admin ID: 725333
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: KVANPAT
Created By: KVANPAT
Employee Id: 730
Comments : Not reported

Action ID: 9467
Start Date: 2003-02-20 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-02-20 13:09:21.
Create Date: 2003-02-20 13:09:21.

DISPOSAL:
Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
 Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133566
Operation Status :Active
Common Name : Foss Maritime Company
Yrs of Operation : 1979 - Current
Comments : 1979 - Current
Updated By : jmw
Updated Date : 1999-06-08 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196796
SIC Code: 4400
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operations SIC Id:196797
SIC Code: 3462
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

FOSS MARITIME CO (Continued)

1004770118

OR CRL:

Facility ID: 2364
Location ID: 470
Status Code: LIS
Facility Status: REMEDIAL INVESTIGATION
Lat/Long: 45.5877 / -122.7713

OR VCS:

ECS Site ID: 2364
Action: RI
Start Date: 05/08/20
End Date: Not reported
Program: VCS
CRL: LIS
Facility Size: 4.46 acres
Project Manager Last Name: Brody-Heine
Project Manager First Name: Bruce

HSIS:

Emergency Contact:	LARRY JOHNSON
Emergency Procedure:	Not reported
Chemical Trade Name:	ACETYLENE
Most Hazardous:	ACETYLENE
Manager Name:	LARRY JOHNSON
Mailing Address:	9030 NW ST HELENS RD PORTLAND, OR 97231
Mailing County:	MULTNOMAH
Day Phone:	5032860631
Employee File #:	006130
No. of Employees:	150
Placard:	No
Business Type:	MARINE TRANSPORTATION
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032860631
Department Or Division Of Company:	ST HELENS RD SITE
Facility Has Written Emergency Plan:	No
Company Name:	FOSS MARITIME CO
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	GAS
Average Amount Possessed During The Year Code:	11
Description Of The Avg Qnty Code:	500-999
Maximum Amount Possessed During The Year Code:	20
Description Of The Max Qnty Code:	1,000-4,999
Applicable Unit Of Measure Code:	3
Description Of The Unit Of Measure:	CUBIC FEET
Storage Container:	
Type Code:	L
Description:	CYLINDER
Pressure of Hazardous Substance Code:	2
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1001
Chemical Abstract Service Identifier Number:	74862
First Hazardous Classification Code For Chemical:	2.1
Hazard Classification 1 Of The Chemical:	Flammable Gases

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Second Hazardous Classification Code For Chemical: 6.3
Hazard Classification 2 Of The Chemical: Acute Health Hazard
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): No
Does The Chemical Contain A 112r Chemical: No
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Sic Code: Not reported

Emergency Contact: LARRY JOHNSON
Emergency Procedure: Not reported
Chemical Trade Name: DIESEL #2
Most Hazardous: DIESEL FUEL #2
Manager Name: LARRY JOHNSON
Mailing Address: 9030 NW ST HELENS RD
PORTLAND, OR 97231
MULTNOMAH
Mailing County: MULTNOMAH
Day Phone: 5032860631
Employee File #: 006130
No. of Employees: 150
Placard: No
Business Type: MARINE TRANSPORTATION
Sprinkler System: Yes
Date Form Completed: Not reported
Business Phone: 5032860631
Department Or Division Of Company: ST HELENS RD SITE
Facility Has Written Emergency Plan: No
Company Name: FOSS MARITIME CO
Fire Dept Code: 0291
Physical State : Not reported
Physical State Of The Substance: LIQUID
Average Amount Possessed During The Year Code: 30
Description Of The Avg Qnty Code: 10,000-49,999
Maximum Amount Possessed During The Year Code: 30
Description Of The Max Qnty Code: 10,000-49,999
Applicable Unit Of Measure Code: 2
Description Of The Unit Of Measure: GALLONS
Storage Container:
Type Code: B
Description: UNDERGROUND TANK
Pressure of Hazardous Substance Code: 1
Temperature of The Hazardous Substance Code: 4
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 1993
Chemical Abstract Service Identifier Number: 68476346
First Hazardous Classification Code For Chemical: 3.3
Hazard Classification 1 Of The Chemical: Flammable Liq. (73F<FP<141F)
Second Hazardous Classification Code For Chemical: 6.4
Hazard Classification 2 Of The Chemical: Chronic Health Hazard
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 2

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	No
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Sic Code:	Not reported
Emergency Contact:	LARRY JOHNSON
Emergency Procedure:	Not reported
Chemical Trade Name:	LUBRICATING OIL
Most Hazardous:	REFINED MINERAL OIL
Manager Name:	LARRY JOHNSON
Mailing Address:	9030 NW ST HELENS RD PORTLAND, OR 97231
Mailing County:	MULTNOMAH
Day Phone:	5032860631
Employee File #:	006130
No. of Employees:	150
Placard:	No
Business Type:	MARINE TRANSPORTATION
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032860631
Department Or Division Of Company:	ST HELENS RD SITE
Facility Has Written Emergency Plan:	No
Company Name:	FOSS MARITIME CO
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	20
Description Of The Avg Qnty Code:	1,000-4,999
Maximum Amount Possessed During The Year Code:	21
Description Of The Max Qnty Code:	5,000-9,999
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	B
Description:	UNDERGROUND TANK
Pressure of Hazardous Substance Code:	1
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1270
Chemical Abstract Service Identifier Number:	64742650
First Hazardous Classification Code For Chemical:	4.5
Hazard Classification 1 Of The Chemical:	Combustible Materials
Second Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 2 Of The Chemical:	Not reported
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Pure
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Sic Code:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

FOSS MARITIME CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1004770118

Emergency Contact: LARRY JOHNSON
Emergency Procedure: Not reported
Chemical Trade Name: OXYGEN
Most Hazardous: OXYGEN
Manager Name: LARRY JOHNSON
Mailing Address: 9030 NW ST HELENS RD
PORTLAND, OR 97231
Mailing County: MULTNOMAH
Day Phone: 5032860631
Employee File #: 006130
No. of Employees: 150
Placard: No
Business Type: MARINE TRANSPORTATION
Sprinkler System: Yes
Date Form Completed: Not reported
Business Phone: 5032860631
Department Or Division Of Company: ST HELENS RD SITE
Facility Has Written Emergency Plan: No
Company Name: FOSS MARITIME CO
Fire Dept Code: 0291
Physical State : Not reported
Physical State Of The Substance: GAS
Average Amount Possessed During The Year Code: 11
Description Of The Avg Qnty Code: 500-999
Maximum Amount Possessed During The Year Code: 20
Description Of The Max Qnty Code: 1,000-4,999
Applicable Unit Of Measure Code: 3
Description Of The Unit Of Measure: CUBIC FEET
Storage Container:
Type Code: L
Description: CYLINDER
Pressure of Hazardous Substance Code: 2
Temperature of The Hazardous Substance Code: 4
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 1072
Chemical Abstract Service Identifier Number: 7782447
First Hazardous Classification Code For Chemical: 2.2
Hazard Classification 1 Of The Chemical: NonFlammable Gases
Second Hazardous Classification Code For Chemical: 5.1
Hazard Classification 2 Of The Chemical: Oxidizers
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): No
Does The Chemical Contain A 112r Chemical: No
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Sic Code: Not reported

Emergency Contact: LARRY JOHNSON
Emergency Procedure: Not reported
Chemical Trade Name: PAINT
Most Hazardous: PETROLEUM DISTILLATES
Manager Name: LARRY JOHNSON

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

FOSS MARITIME CO (Continued)

1004770118

Mailing Address:	9030 NW ST HELENS RD PORTLAND, OR 97231
Mailing County:	MULTNOMAH
Day Phone:	5032860631
Employee File #:	006130
No. of Employees:	150
Placard:	No
Business Type:	MARINE TRANSPORTATION
Sprinkler System:	Yes
Date Form Completed:	Not reported
Business Phone:	5032860631
Department Or Division Of Company:	ST HELENS RD SITE
Facility Has Written Emergency Plan:	No
Company Name:	FOSS MARITIME CO
Fire Dept Code:	0291
Physical State :	Not reported
Physical State Of The Substance:	LIQUID
Average Amount Possessed During The Year Code:	04
Description Of The Avg Qnty Code:	50-199
Maximum Amount Possessed During The Year Code:	04
Description Of The Max Qnty Code:	50-199
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Storage Container:	
Type Code:	F
Description:	CAN
Pressure of Hazardous Substance Code:	1
Temperature of The Hazardous Substance Code:	4
Days The Hazardous Substance Is On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
United Nations/north America 4 Digit Classification Number:	1263
Chemical Abstract Service Identifier Number:	64742478
First Hazardous Classification Code For Chemical:	3.3
Hazard Classification 1 Of The Chemical:	Flammable Liq. (73F<FP<141F)
Second Hazardous Classification Code For Chemical:	6.3
Hazard Classification 2 Of The Chemical:	Acute Health Hazard
Third Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 3 Of The Chemical:	Not reported
Is Substance Pure Or Mixture:	Pure
Hazard Rank:	2
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Sic Code:	Not reported

[Click this hyperlink](#) while viewing on your computer to access
1 additional OR HSIS record(s) in the EDR Site Report.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

27
WNW
1/2-1
4625 ft.

OLYMPIC PIPE LINE COMPANY
11400 NW ST HELENS RD
PORTLAND, OR 97231

SHWS - ECSI 1006857930
FINDS 110014203762

Relative:
Higher

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality

Actual:
54 ft.

ECSI:

State ID Number: 2374
Study Area: False
Cercis ID: Not reported
Size: Not reported
Orphan: False
Lat/Long: 45.6058 / -122.791
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 34
Legislative : 34
FACA ID : 1269
Update Date : 2002-08-07 00:00:00
Created Time : 1999-06-15 00:00:00

Brown ID Not reported
Coordinator Supplier: gmw
Tax Lots: 5
NPL: False
Region ID: 2
Tax Lots: 5
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: Not reported
Score Value: 0
Created Date: jmw

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: Not reported
Update By: Not reported

Substance ID : Not reported
Code : Not reported
Substance Name : Not reported
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : Not reported
Feature Id : Not reported
Hazard Release Id : Not reported
Medium Code Id : Not reported
Substance Id : Not reported
Unit Code : Not reported
Observation : Not reported
Owner Operator : Not reported
Lab Data : Not reported
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : Not reported
Last Updated On : Not reported
Sample Comment : Not reported

Alias Name: Portland Harbor Sediment Study
SEE ALSO Olympic Pipeline (ECSI #3342)
Investigation Status: 208

NARR:

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

OLYMPIC PIPE LINE COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006857930

NARR ID: 5738426
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR Comments Portland Harbor Sediment Investigation Report, prepared by Roy F. Weston, Inc. for US EPA, 5/98. Refer to ECSI file #3342 for additional information.
Historic petroleum leaks reported.
Willamette River sediments.
(6/15/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, Olympic Pipe Line Company's petroleum pipeline has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent on March 5, 1999. A response from Olympic Pipe Line Co. is expected in June 1999. A site screening is scheduled (level II priority). (5/22/02 BBH/VCP) Olympic Pipeline operates three delivery facilities with above ground structures (valves, tanks, etc.) in the Portland area. Olympic completed an Expanded PA for the Portland Delivery Facility, located within the Mobil Terminal site (ECSI #137), in May 2001. Please refer to ECSI file #3342 for additional details.

NARR ID: 5738427
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738428
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5738429
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133576 FACA Id : 1269
Site Name: Olympic Pipeline Company
County Code : 26.00
Owner Name: Olympic Pipe Line Company
Owner Address: 11400 NW St. Helens Rd (from RM 3.5 to RM 7.9)
Portland, 97231
Lat/Long 45.6058 / -122.7911
Owner Code: SUS

PERMIT:

Permit Number: Not reported Permit Type: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 707114 Action ID: 9424
Agency ID : Dept Of Environmental Quality Start Date: 1999-06-15 00:00:00
Further Action: Not reported Region ID: Northwestern Region

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

OLYMPIC PIPE LINE COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006857930

Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 313
Comments : Not reported

Substance Code: VCS
Cleanup Flag: False
Update Date: 1999-06-15 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 707115
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9508
Start Date: 1999-06-15 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-06-15 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

OLYMPIC PIPE LINE COMPANY (Continued)

1006857930

Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133576
Operation Status :Active
Common Name : Olympic Pipe Line Company
Yrs of Operation : unknown
Comments : unknown
Updated By : jmw
Updated Date : 1999-06-15 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196806
SIC Code: 4600
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

28
WNW
1/2-1
4746 ft.

OWENS CORNING - LINNTON
11444 NW ST. HELENS RD
PORTLAND, OR 97231

SHWS - ECSI S105613923
OR VCS N/A

Relative:
Higher

Actual:
54 ft.

ECSI:

State ID Number: 1036
Study Area: False
Cercis ID: Not reported
Size: 43 acres
Orphan: False
Lat/Long: 45.6069 / -122.789
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 34
Legislative : 34
FACA ID : 8989
Update Date : 2003-09-11 17:02:35.
Created Time : 1990-07-01 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: 6
NPL: False
Region ID: 2
Tax Lots: 6
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 259
Score Value: 78
Created Date: CONV

HAZ RELEASED:

Quant. Released: Unknown
Date: Unknown
Update Date: 1990-01-07 00:00:00
Update By: Not reported
Substance ID : 121839
Code : 87-86-5
Substance Name : PENTACHLOROPHENOL

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

OWENS CORNING - LINNTON (Continued)

S105613923

Substance Abbrev. : Not reported
Substance Categ ID : 8495
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317688
Sub Alias Name : CHLOROPHEN
Substance Alias ID : 317689
Sub Alias Name : PCP
Substance Alias ID : 317690
Sub Alias Name : PENCHLOROL
Substance Alias ID : 317691
Sub Alias Name : PHENOL,PENTCHLORO-
Sampling Result ID : 346667
Feature Id : Not reported
Hazard Release Id : 385510
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1990-01-04 00:00:00
End Date : 1990-01-04 00:00:00
Minimum Concentration : .00
Max Concentration : 2.70
Last Update By : kpd
Last Updated On : 1996-06-27 00:00:00
Sample Comment : up to 2.7 ppm
Quant. Released: Unknown
Date: Unknown
Update Date: 1990-01-07 00:00:00
Update By: Not reported
Substance ID : 121673
Code : 7440-50-8
Substance Name : COPPER
Substance Abbrev. : Not reported
Substance Categ ID : 8464
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319296
Sub Alias Name : CU
Sampling Result ID : 346668
Feature Id : Not reported
Hazard Release Id : 385523
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1990-01-04 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

OWENS CORNING - LINNTON (Continued)

S105613923

End Date : 1990-01-04 00:00:00
Minimum Concentration : .00
Max Concentration : 547.00
Last Update By : kpd
Last Updated On : 1996-06-27 00:00:00
Sample Comment : up to 547 ppm
Quant. Released: Unknown
Date: Unknown
Update Date: 1990-01-07 00:00:00
Update By: Not reported
Substance ID : 121671
Code : 7440-47-3
Substance Name : CHROMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8462
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318145
Sub Alias Name : CHROMIUM, INORGANIC
Substance Alias ID : 319294
Sub Alias Name : CHROMIUM, TOTAL
Sampling Result ID : 346669
Feature Id : Not reported
Hazard Release Id : 385524
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1990-01-04 00:00:00
End Date : 1990-01-04 00:00:00
Minimum Concentration : .00
Max Concentration : 21.30
Last Update By : kpd
Last Updated On : 1996-06-27 00:00:00
Sample Comment : up to 21.3 ppm
Quant. Released: Unknown
Date: Unknown
Update Date: 1990-01-07 00:00:00
Update By: Not reported
Substance ID : 121664
Code : 7440-38-2
Substance Name : ARSENIC
Substance Abbrev. : Not reported
Substance Categ ID : 8439
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319286
Sub Alias Name : AS
Sampling Result ID : 345028
Feature Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

OWENS CORNING - LINNTON (Continued)

S105613923

Hazard Release Id : 385525
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1990-01-04 00:00:00
End Date : 1990-01-04 00:00:00
Minimum Concentration : .00
Max Concentration : 46.20
Last Update By : kpd
Last Updated On : 1996-06-27 00:00:00
Sample Comment : up to 46.2 ppm
Quant. Released: Unknown
Date: Unknown
Update Date: 1990-01-07 00:00:00
Update By: Not reported
Substance ID : 121996
Code : ECD228
Substance Name : PETROLEUM HYDROCARBONS
Substance Abbrev. : Not reported
Substance Categ ID : 8534
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 346841
Feature Id : Not reported
Hazard Release Id : 385526
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 7
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1990-01-04 00:00:00
End Date : 1990-01-04 00:00:00
Minimum Concentration : .00
Max Concentration : 28059.00
Last Update By : kpd
Last Updated On : 1996-06-27 00:00:00
Sample Comment : up to 28,059 ppm
Sampling Result ID : 340787
Feature Id : Not reported
Hazard Release Id : 385526
Medium Code Id : 701
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OWENS CORNING - LINNTON (Continued)

S105613923

Start Date : 1997-06-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 1999-10-14 00:00:00
Sample Comment : 2,522 ppb

Alias Name: Kingsley Park
Linnton Planing Mill
Paramount Petroleum Site
Portland Harbor Sediment Study
Trumbull Asphalt Facility

Investigation Status: 208

NARR:

NARR ID: 5731078
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: GWISTAR
Updated Date: 2003-06-09 15:41:55

NARR Comments (9/21/91 ALB/SAS) The site has been used for different operations, including a wholesale lumber yard, a wood-treating facility, and most recently a planing mill. In 1989, a prospective purchaser hired Century West Engineering to investigate the site. Century West found stained soils, uncharacterized drums, and a gasoline UST. Investigations continued into 1990. The underground tank was removed, and petroleum contaminated soils were aerated on-site. (See LUST Log #26-90-0006 for more information.) A monitoring well installed upgradient of the tank excavation showed petroleum in groundwater, including up to 150 ppb benzene. The contamination was believed to originate from the adjacent GATX facility. (See ECSI #1096 for more information.) The stained soils and wood-treating areas had high levels of TPH and moderate levels of metals and PCP, but the contamination was spatially limited. (The drums were apparently removed by the site owner, Owens-Corning Fiberglass.) (6/15/99 JMW/SAP) We ston sampling results from the Portland Harbor Sediment Study revealed arsenic, thallium, dioctylphthalates, DDT, PAHs, and methylnaphthalene in river sediments adjacent to the site. 1) June 1990 SRH "Supplemental Environmental Site Characterization Report". 2) August 1990 Century West "Report of Findings". 3) October 1990 SRH "Report on Site Investigation and Cleanup Activities". 4) June 1991 SRH "Summary Report: Quarterly Groundwater Monitoring". 5) August 1991 SRH "Summary Report: Quarterly Groundwater Monitoring". 6) September 1991 DEQ "Preliminary Assessment". 7) January 1992 SEACOR "Status Report on Quarterly Groundwater Monitoring". 8) July 1992 SEACOR "Status Report on Quarterly Groundwater Monitoring". 9) LUST Log #26-90-0006. 10) GATX site file [ECSI #1096]. 11) Correspondence FROM owner and/or operator. 12) Laboratory results. 13) EPA. 1997. Portland Harbor Sediment Investigation Report. Pentachlorophenol, petroleum hydrocarbons, metals. In adjacent Willamette River sediments: dioctylphthalate, thallium, DDT, PAHs, arsenic and methylnaphthalene. Leaking underground storage tank; past practices; possible contaminant migration from off-site source. Time of releases: unknown. Willamette River sediments. The site is adjacent to the Willamette River. Soils are mostly silt, with some

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

OWENS CORNING - LINNTON (Continued)

S105613923

discontinuous sand and/or gravel layers. Shallow groundwater is about 19 feet
bgs. No drinking water wells are within one mile of the site. Forest Park is
less than 0.25
mile west. The majority of the site is covered by grasses and weeds. The site is
not fenced, and is occasionally occupied by transients.
(9/21/91 ALB/SAS) DEQ completed a Preliminary Assessment at the site in
September 1991. Groundwater contamination was confined to one monitoring well,
and the level of contamination rapidly dropped over time. The leaking
underground storage tank was
remediated to DEQ's satisfaction, and the remaining soil contamination (TPH and
wood-treating substances) is not a concern due to limited targets. No further
action is necessary at this site at this time. (6/15/99 JMW/SAP) Based on
initial sampling
results from a river sediment quality study, the Owens Corning property has been
identified as a potential source of contamination to the Portland Harbor. A Site
Assessment Review Notice was sent February 11, 1999. Response from Owens Corning
was re
ceived from April 23, 1999. A site screening is scheduled (level II priority).
(8/17/99 TBG/SAP) Strategy Recommendation for an Expanded Preliminary Assessment
to evaluate link between site activities and sediment contamination. (12/6/99
JMW/SAP) Vo
luntary Letter Agreement signed 10/18/99. (9/20/00 TBG/VCP) Preliminary
Assessment submitted in April 2000, with subsurface sampling conducted in August
2000 and February 2001. (11/20/01 TBG/VCP) XPA sampling results were submitted
in March 2001, an
d showed two locations with elevated surface soil concentrations of petroleum
constituents. These areas were re-sampled in October 2001 to evaluate potential
contaminant migration to the Willamette River. (10/30/02 TBG/VCP) A March 2002
report showe
d some elevated petroleum constituents in surface soil, but no complete pathway
to the Willamette River. No source control measures are necessary at this time,
although recent greenway improvement to the riverbank should be maintained to
manage surf
ace runoff to the river.

NARR ID: 5731079
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731080
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731081
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731082
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

OWENS CORNING - LINNTON (Continued)

S105613923

Updated Date: 2002-12-17 08:50:04
NARR ID: 5731083
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5731084
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 132345
Site Name: Owens Corning - Linnton
County Code : 26.00
Owner Name: Linnton Planing Mill
Owner Address: 11444 NW St. Helens Rd
Portland, 97231

FACA Id : 8989

Lat/Long 45.6069 / -122.7899

Owner Code: SUS

Owner Site Num: 132346

FACA Id : 8989

Site Name: Owens Corning - Linnton
County Code : 26.00
Owner Name: Owens Corning Trumbull Division
Owner Address: 11444 NW St. Helens Rd
Portland, 97231

Lat/Long 45.6069 / -122.7899

Owner Code: SUS

Owner Site Num: 132347

FACA Id : 8989

Site Name: Owens Corning - Linnton
County Code : 26.00
Owner Name: Rivergate Timber Co.
Owner Address: 11444 NW St. Helens Rd
Portland, 97231

Lat/Long 45.6069 / -122.7899

Owner Code: SUS

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 720207
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 224
Comments : Not reported

Action ID: 9456
Start Date: 1990-07-23 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-03-31 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705923
Agency ID : Dept Of Environmental Quality
Further Action: Not reported

Action ID: 9425
Start Date: 1999-09-07 00:00:00
Region ID: Northwestern Region

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

OWENS CORNING - LINNTON (Continued)

EDR ID Number
EPA ID Number

Database(s)

S105613923

Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-02-01 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705924
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Action ID: 9449
Start Date: 1999-09-07 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2000-02-01 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705925
Agency ID : Dept Of Environmental Quality
Further Action: High
Complete Date: 256
Rank Value: 78
Updated By: GWISTAR
Created By: Not reported
Employee Id: 2157
Comments : Strategy Recommendation - high priority for an XPA.

Action ID: 9510
Start Date: 1999-09-07 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2003-05-15 15:18:48.
Create Date: 2002-12-17 08:50:22.

Admin ID: 716221
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 224
Comments : Not reported

Action ID: 9424
Start Date: 1990-07-01 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1995-03-31 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 727229
Agency ID : Dept Of Environmental Quality
Further Action: Medium-Low
Complete Date: 259
Rank Value: Not reported
Updated By: GWISTAR
Created By: GWISTAR
Employee Id: 2157
Comments : Maintain greenway improvement to the riverbank to manage surface runoff to the Willamette River.

Action ID: 9470
Start Date: 2002-10-30 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-09-11 17:02:24.
Create Date: 2003-09-11 17:02:24.

Admin ID: 706354
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: GWISTAR
Created By: Not reported
Employee Id: 2157
Comments : Not reported

Action ID: 9520
Start Date: 1999-10-19 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 2003-09-11 17:00:42.
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

OWENS CORNING - LINNTON (Continued)

S105613923

Admin ID:	716876	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1990-07-22 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-03-31 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	224		
Comments :	Not reported		

Admin ID:	716877	Action ID:	9496
Agency ID :	Dept Of Environmental Quality	Start Date:	1990-07-22 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-03-31 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	224		
Comments :	Not reported		

Admin ID:	707116	Action ID:	9508
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-06-15 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-06-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Portland Harbor Site Discovery Project.		

Admin ID:	707833	Action ID:	9440
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-18 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-12-06 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	313		
Comments :	Not reported		

Admin ID:	707834	Action ID:	9519
Agency ID :	Dept Of Environmental Quality	Start Date:	1999-10-18 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	1999-12-06 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	313		
Comments :	Not reported		

Admin ID:	724637	Action ID:	9437
Agency ID :	Dept Of Environmental Quality	Start Date:	1991-09-20 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	dmc	Update Date:	1995-03-31 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

OWENS CORNING - LINNTON (Continued)

EDR ID Number
EPA ID Number

Database(s)

S105613923

Created By: Not reported
Employee Id: 224
Comments : Not reported
Create Date: 2002-12-17 08:50:22.

Admin ID: 724638
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: GWISTAR
Created By: Not reported
Employee Id: 224
Comments : Voided in 1999, based on new data.
Action ID: 9443
Start Date: 1991-09-21 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 2002-12-26 15:14:49.
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported
Feature ID: Not reported
End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OWENS CORNING - LINNTON (Continued)

S105613923

Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 132345
Operation Status :Inactive
Common Name : Linnton Planing Mill
Yrs of Operation : 1978-1990
Comments : 1978-1990
Updated By : jmw
Updated Date : 1999-06-15 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:194916
SIC Code: 2421
Created By: Not reported
Created Date: 2002-12-17 08:50:34.
Operation Id : 132346
Operation Status :Active
Common Name : Owens Corning Trumbull Division
Yrs of Operation : 1993 - Current
Comments : 1993 - Current
Updated By : jmw
Updated Date : 1999-06-15 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:Not reported
SIC Code: Not reported
Created By: Not reported
Created Date: Not reported
Operation Id : 132347
Operation Status :Inactive
Common Name : Rivergate Timber Co.
Yrs of Operation : 1969-1971
Comments : 1969-1971
Updated By : kpd
Updated Date : 1996-06-27 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196329
SIC Code: 2491

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

OWENS CORNING - LINNTON (Continued)

EDR ID Number
EPA ID Number

Database(s)

S105613923

Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 1036
Action: RAOTH
Start Date: 10/30/20
End Date: 30-Oct-0
Program: VCS
CRL: SUS
Facility Size: 43 acres
Project Manager Last Name: Gainer
Project Manager First Name: Tom

G29
NE
1/2-1
4898 ft.

RIVERGATE AUTO WRECKING - U PULL IT DIVISION
12104 N COLUMBIA BLVD
PORTLAND, OR 97203

SHWS - ECSI 1006867865
FINDS 110014308016

Site 1 of 4 in cluster G

Relative:
Higher

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality

Actual:
45 ft.

ECSI:

State ID Number: 2056
Study Area: False
Cercdis ID: 0002392835
Size: 6.9 acres total
Orphan: False
Lat/Long: 45.6104 / -122.759
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 36
Legislative : 36
FACA ID : 38619
Update Date : 2003-11-26 11:48:01.
Created Time : 1997-06-10 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: TL 13 and 25, Ramsey Villa C/D
NPL: False
Region ID: 2
Tax Lots: TL 13 and 25, Ramsey Villa C/D
Township Zone: N
Range Zone: W
Qtr Section: CB
Further Action: 258
Score Value: 79
Created Date: kpd

HAZ RELEASED:

Quant. Released: Unknown
Date: Presumed 1974 to 1997.
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 122015
Code : ECD282
Substance Name : OIL - WASTE
Substance Abbrev. : Not reported
Substance Categ ID : 8541
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : Not reported
Feature Id : Not reported
Hazard Release Id : Not reported
Medium Code Id : Not reported
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Unit Code : Not reported
Observation : Not reported
Owner Operator : Not reported
Lab Data : Not reported
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : Not reported
Last Updated On : Not reported
Sample Comment : Not reported
Quant. Released: Unknown
Date: Presumed 1974 to 1997.
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 120862
Code : 107-21-1
Substance Name : ETHYLENE GLYCOL
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316395
Sub Alias Name : DIHYDROXYETHANE,1,2-
Substance Alias ID : 316396
Sub Alias Name : ETHANEDIOL,1,2-
Substance Alias ID : 316397
Sub Alias Name : ETHYLENE DIHYDRATE
Substance Alias ID : 316398
Sub Alias Name : GLYCOL
Substance Alias ID : 316399
Sub Alias Name : GLYCOL ALCOHOL
Sampling Result ID : 340919
Feature Id : Not reported
Hazard Release Id : 381135
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 2 to 10 feet bgs (subsurface soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 9.50
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 120941

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Code : 117-81-7
Substance Name : BIS(2-ETHYLHEXYL)PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : 8480
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316655
Sub Alias Name : BIS(2-ETHYLHEXYL)-1,2-BENZENEDICARBOXYLATE
Substance Alias ID : 316656
Sub Alias Name : BIS(2-ETHYLHEXYL)-o-PHTHALATE
Substance Alias ID : 316657
Sub Alias Name : DI(2-ETHYLHEXYL)ORTHOPHTHALATE
Substance Alias ID : 316658
Sub Alias Name : DI-2-ETHYLHEXYLPHTHALATE
Substance Alias ID : 316659
Sub Alias Name : DI-sec-OCTYL PHTHALATE
Substance Alias ID : 316660
Sub Alias Name : DIOCTYL PHTHALATE
Substance Alias ID : 316661
Sub Alias Name : PHTHALIC ACID, BIS(2-ETHYLHEXYL) ESTER
Sampling Result ID : 340875
Feature Id : Not reported
Hazard Release Id : 382252
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 1900.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils (fill)
Sampling Result ID : 340901
Feature Id : Not reported
Hazard Release Id : 382252
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 59.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge
Sampling Result ID : 340932

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Feature Id : Not reported
Hazard Release Id : 382252
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 7300.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121614
Code : 72-54-8
Substance Name : DDD,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319194
Sub Alias Name : DICHORO-2,2-BIS(p-CHLOROPHENYL)ETHANE,1,1-
Substance Alias ID : 319195
Sub Alias Name : DICHLORODIPHENYLDICHLOROETHANE
Substance Alias ID : 319196
Sub Alias Name : RHOTHANE
Substance Alias ID : 319197
Sub Alias Name : TDE
Substance Alias ID : 319198
Sub Alias Name : TDE,p,p'-
Substance Alias ID : 319199
Sub Alias Name : TETRACHLORODIPHENYLETHANE
Sampling Result ID : 340876
Feature Id : Not reported
Hazard Release Id : 382253
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 3 ft to 7 ft bgs (subsurface soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : .47
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Sample Comment : Native subsurface soils
Sampling Result ID : 340944
Feature Id : Not reported
Hazard Release Id : 382253
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 4.80
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121613
Code : 72-43-5
Substance Name : METHOXYCHLOR
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319190
Sub Alias Name : DMDT
Substance Alias ID : 319191
Sub Alias Name : ETHANE,1,1,1-TRICHLORO-2,2'-BIS(p-METHOXYPHENYL)-
Substance Alias ID : 319192
Sub Alias Name : MARLATE
Substance Alias ID : 319193
Sub Alias Name : METHOXY-DDT
Sampling Result ID : 340877
Feature Id : Not reported
Hazard Release Id : 382254
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 3 ft to 7 ft bgs (subsurface soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 2.30
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Native subsurface soils
Sampling Result ID : 340947

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Feature Id : Not reported
Hazard Release Id : 382254
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 24.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 121777
Code : 78-93-3
Substance Name : METHYL ETHYL KETONE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317507
Sub Alias Name : BUTANONE,2-
Substance Alias ID : 317508
Sub Alias Name : ETHYL METHYL KETONE
Substance Alias ID : 317509
Sub Alias Name : MEK
Substance Alias ID : 317510
Sub Alias Name : METHYL ACETONE
Sampling Result ID : 340878
Feature Id : Not reported
Hazard Release Id : 382255
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 18000.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Update By: Not reported
Substance ID : 121608
Code : 71-43-2
Substance Name : BENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8502
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319178
Sub Alias Name : BENZOL
Substance Alias ID : 319179
Sub Alias Name : COAL NAPTHA
Substance Alias ID : 319180
Sub Alias Name : CYCLOHEXATRIENE
Substance Alias ID : 319181
Sub Alias Name : PHENE
Substance Alias ID : 319182
Sub Alias Name : PYROBENZOL
Sampling Result ID : 340879
Feature Id : Not reported
Hazard Release Id : 382256
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 1600.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340891
Feature Id : Not reported
Hazard Release Id : 382256
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-09 00:00:00
End Date : 1999-06-09 00:00:00
Minimum Concentration : .00
Max Concentration : 2.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Separator sludge
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Update By: Not reported
Substance ID : 120883
Code : 108-88-3
Substance Name : TOLUENE
Substance Abbrev. : Not reported
Substance Categ ID : 8520
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316466
Sub Alias Name : BENZENE,METHYL-
Substance Alias ID : 316467
Sub Alias Name : METHACIDE
Substance Alias ID : 316468
Sub Alias Name : METHYLBENZENE
Substance Alias ID : 316469
Sub Alias Name : METHYLBENZOL
Substance Alias ID : 316470
Sub Alias Name : PHENYLMETHANE
Substance Alias ID : 316471
Sub Alias Name : TOLUOL
Sampling Result ID : 340880
Feature Id : Not reported
Hazard Release Id : 382257
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 49000.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 120781
Code : 100-41-4
Substance Name : ETHYLBENZENE
Substance Abbrev. : Not reported
Substance Categ ID : 8515
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316146
Sub Alias Name : ETHYLBENZOL
Substance Alias ID : 316147
Sub Alias Name : PHENYLETHANE
Sampling Result ID : 340881

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867865

Feature Id : Not reported
Hazard Release Id : 382258
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 35000.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 121051
Code : 1330-20-7
Substance Name : XYLENEs
Substance Abbrev. : Not reported
Substance Categ ID : 8526
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317017
Sub Alias Name : DIMETHYLBENZENES
Substance Alias ID : 317018
Sub Alias Name : XYLOLs
Sampling Result ID : 340882
Feature Id : Not reported
Hazard Release Id : 382259
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 400000.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121868
Code : 91-20-3
Substance Name : NAPHTHALENE

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Substance Abbrev. : Not reported
Substance Categ ID : 8494
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317793
Sub Alias Name : MOTH BALLS
Substance Alias ID : 317794
Sub Alias Name : NAPHTHENE
Substance Alias ID : 317795
Sub Alias Name : TAR CAMPHOR
Sampling Result ID : 340922
Feature Id : Not reported
Hazard Release Id : 382260
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 43.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Sampling Result ID : 340971
Feature Id : Not reported
Hazard Release Id : 382260
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 6900.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121871
Code : 91-57-6
Substance Name : METHYLNAPHTHALENE,2-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317808
Sub Alias Name : METHYLNAPHTHALENE,beta-
Substance Alias ID : 317809
Sub Alias Name : NAPHTHALENE,2-METHYL-
Sampling Result ID : 340883
Feature Id : Not reported
Hazard Release Id : 382261
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 8400.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340923
Feature Id : Not reported
Hazard Release Id : 382261
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 82.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121824
Code : 85-01-8
Substance Name : PHENANTHRENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317648
Sub Alias Name : PHENATHRIN
Sampling Result ID : 340884
Feature Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Hazard Release Id : 382262
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 240.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340924
Feature Id : Not reported
Hazard Release Id : 382262
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 130.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 121426
Code : 53469-21-9
Substance Name : PCB 1242
Substance Abbrev. : Not reported
Substance Categ ID : 8554
Substance Sub Categ : PCB Substances for the OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318695
Sub Alias Name : AROCHLOR 1242
Substance Alias ID : 318696
Sub Alias Name : AROCLOR 1242
Sampling Result ID : 340885
Feature Id : Not reported
Hazard Release Id : 382263
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Lab Data : True
Sample Depth : 4 inches to 4 feet bgs
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 110.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 120909
Code : 11097-69-1
Substance Name : PCB 1254
Substance Abbrev. : Not reported
Substance Categ ID : 8556
Substance Sub Categ : PCB Substances for the OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316559
Sub Alias Name : AROCHLOR 1254
Substance Alias ID : 316560
Sub Alias Name : AROCLOR 1254
Sampling Result ID : 340886
Feature Id : Not reported
Hazard Release Id : 382264
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 90.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 120908
Code : 11096-82-5
Substance Name : PCB 1260
Substance Abbrev. : Not reported
Substance Categ ID : 8496
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8557

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Substance Sub Categ : PCB Substances for the OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316557
Sub Alias Name : AROCHLOR 1260
Substance Alias ID : 316558
Sub Alias Name : AROCLOR 1260
Sampling Result ID : 340887
Feature Id : Not reported
Hazard Release Id : 382265
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 90.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 121059
Code : 1336-36-3
Substance Name : PCBs
Substance Abbrev. : Not reported
Substance Categ ID : 8558
Substance Sub Categ : PCB Substances for the OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317029
Sub Alias Name : BIPHENYL,POLYCHLORO-
Substance Alias ID : 317030
Sub Alias Name : CHLORINATED BIPHENYL
Substance Alias ID : 317031
Sub Alias Name : CHLOROBIPHENYL
Substance Alias ID : 317032
Sub Alias Name : POLYCHLORINATED BIPHENYLs
Substance Alias ID : 317033
Sub Alias Name : POLYCHLOROBIPHENYL
Sampling Result ID : 340888
Feature Id : Not reported
Hazard Release Id : 382266
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Sample Depth : 4 inches to 4 feet bgs
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 290.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Subsurface soils - fill
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121587
Code : 67-64-1
Substance Name : ACETONE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319114
Sub Alias Name : DIMETHYL KETONE
Substance Alias ID : 319115
Sub Alias Name : KETOPROPANE,beta-
Substance Alias ID : 319116
Sub Alias Name : PROPANONE,2-
Substance Alias ID : 319117
Sub Alias Name : PYROACETIC ETHER
Sampling Result ID : 340889
Feature Id : Not reported
Hazard Release Id : 382267
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 13 to 17 feet bgs (subsurface soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 10.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - native
Sampling Result ID : 340890
Feature Id : Not reported
Hazard Release Id : 382267
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-09 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

End Date : 1999-06-09 00:00:00
Minimum Concentration : .00
Max Concentration : 10.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge.
Sampling Result ID : 340920
Feature Id : Not reported
Hazard Release Id : 382267
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 150.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at o/w separator outfall
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121821
Code : 84-74-2
Substance Name : DI-n-BUTYL PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317639
Sub Alias Name : BENZENEDICARBOXYLIC ACID,1,2-, DIBUTYL ESTER
Substance Alias ID : 317640
Sub Alias Name : BUTYL PHTHALATE
Substance Alias ID : 317641
Sub Alias Name : BUTYL PHTHALATE,n-
Substance Alias ID : 317642
Sub Alias Name : DBP
Substance Alias ID : 317643
Sub Alias Name : DIBUTYL PHTHALATE
Sampling Result ID : 340892
Feature Id : Not reported
Hazard Release Id : 382268
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 2 to 10 feet bgs (subsurface soils)
Start Date : 1999-06-08 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 120.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340926
Feature Id : Not reported
Hazard Release Id : 382268
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 48.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121011
Code : 127-18-4
Substance Name : TETRACHLOROETHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : 8519
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8551
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316912
Sub Alias Name : ETHENE,TETRACHLORO-
Substance Alias ID : 316913
Sub Alias Name : ETHYLENE TETRACHLORIDE
Substance Alias ID : 316914
Sub Alias Name : PERCHLOROETHYLENE
Substance Alias ID : 316915
Sub Alias Name : PERCLENENE
Substance Alias ID : 316916
Sub Alias Name : TETRACHLOROETHENE
Substance Alias ID : 316917
Sub Alias Name : TETRACHLOROETHENE,1,1,2,2-
Substance Alias ID : 316918
Sub Alias Name : TETRACHLOROETHYLENE,1,1,2,2-
Sampling Result ID : 340893
Feature Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Hazard Release Id : 382269
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 3.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340894
Feature Id : Not reported
Hazard Release Id : 382269
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-09 00:00:00
End Date : 1999-06-09 00:00:00
Minimum Concentration : .00
Max Concentration : 11.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge
Sampling Result ID : 340921
Feature Id : Not reported
Hazard Release Id : 382269
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 35.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at o/w separator outfall
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121019
Code : 129-00-0
Substance Name : PYRENE
Substance Abbrev. : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867865

Substance Categ ID : 8497
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316950
Sub Alias Name : BENZO(def)PHENANTHRENE
Sampling Result ID : 340895
Feature Id : Not reported
Hazard Release Id : 382270
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 55.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340928
Feature Id : Not reported
Hazard Release Id : 382270
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 1700.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121826
Code : 85-68-7
Substance Name : BUTYL BENZYL PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317652
Sub Alias Name : BENZYL-n-BUTYL PHTHALATE
Substance Alias ID : 317653

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Sub Alias Name : PHTHALIC ACID, BENZYL BUTYL ESTER
Sampling Result ID : 340896
Feature Id : Not reported
Hazard Release Id : 382271
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 96.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340929
Feature Id : Not reported
Hazard Release Id : 382271
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 380.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121462
Code : 56-55-3
Substance Name : BENZO(a)ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8475
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318790
Sub Alias Name : BENZ(a)ANTHRACENE
Substance Alias ID : 318791
Sub Alias Name : BENZANTHRACENE,1,2-
Substance Alias ID : 318792
Sub Alias Name : BENZANTHRENE
Substance Alias ID : 318793
Sub Alias Name : BENZOANTHRACENE
Substance Alias ID : 318794

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Sub Alias Name : BENZPHENANTHRENE,2,3-
Substance Alias ID : 318795
Sub Alias Name : NAPHTHANTHRACENE
Substance Alias ID : 318796
Sub Alias Name : TETRAPHENE
Sampling Result ID : 340897
Feature Id : Not reported
Hazard Release Id : 382272
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 81.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340930
Feature Id : Not reported
Hazard Release Id : 382272
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 630.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121210
Code : 218-01-9
Substance Name : CHRYSENE
Substance Abbrev. : Not reported
Substance Categ ID : 8481
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317438
Sub Alias Name : BENZ(a)PHENANTHRENE
Substance Alias ID : 317439
Sub Alias Name : BENZPHENANTHRENE,1,2-
Substance Alias ID : 317440

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Sub Alias Name : DIBENZONAPHTHALENE,1,2,5,6-
Sampling Result ID : 340898
Feature Id : Not reported
Hazard Release Id : 382273
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 85.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340931
Feature Id : Not reported
Hazard Release Id : 382273
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 1200.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121196
Code : 207-08-9
Substance Name : BENZO(k)FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8478
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317400
Sub Alias Name : B(k)F
Substance Alias ID : 317401
Sub Alias Name : BENZOFLUORANTHENE,11,12-
Sampling Result ID : 340899
Feature Id : Not reported
Hazard Release Id : 382274
Medium Code Id : 703
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 150.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340935
Feature Id : Not reported
Hazard Release Id : 382274
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 3200.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121516
Code : 60-57-1
Substance Name : DIELDRIN
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318927
Sub Alias Name : HEOD
Substance Alias ID : 318928
Sub Alias Name : OCTALOX
Sampling Result ID : 340900
Feature Id : Not reported
Hazard Release Id : 382275
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 2.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121662
Code : 7440-36-0
Substance Name : ANTIMONY
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319283
Sub Alias Name : SB
Substance Alias ID : 319284
Sub Alias Name : STIBIUM
Sampling Result ID : 340902
Feature Id : Not reported
Hazard Release Id : 382276
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 5.30
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340949
Feature Id : Not reported
Hazard Release Id : 382276
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 17.30
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121664
Code : 7440-38-2
Substance Name : ARSENIC
Substance Abbrev. : Not reported
Substance Categ ID : 8439
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319286
Sub Alias Name : AS
Sampling Result ID : 340903
Feature Id : Not reported
Hazard Release Id : 382277
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 3 to 7 feet bgs (subsurface soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 10.10
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - native
Sampling Result ID : 340950
Feature Id : Not reported
Hazard Release Id : 382277
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 11.30
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121668
Code : 7440-43-9
Substance Name : CADMIUM
Substance Abbrev. : Not reported

Map ID
Direction :
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number
Database(s)

1006867865

Substance Categ ID : 8460
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319291
Sub Alias Name : CD
Sampling Result ID : 340904
Feature Id : Not reported
Hazard Release Id : 382278
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 1.60
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340951
Feature Id : Not reported
Hazard Release Id : 382278
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 5.30
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121671
Code : 7440-47-3
Substance Name : CHROMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8462
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318145
Sub Alias Name : CHROMIUM, INORGANIC
Substance Alias ID : 319294

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Sub Alias Name : CHROMIUM, TOTAL
Sampling Result ID : 340905
Feature Id : Not reported
Hazard Release Id : 382279
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 3110.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340906
Feature Id : Not reported
Hazard Release Id : 382279
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 138.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge
Sampling Result ID : 340952
Feature Id : Not reported
Hazard Release Id : 382279
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 1700.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at stormwater overflow pipe outfall
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121672

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Code : 7440-48-4
Substance Name : COBALT
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319295
Sub Alias Name : CO
Sampling Result ID : 337594
Feature Id : Not reported
Hazard Release Id : 382280
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 19.50
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments in drainage ditch
Sampling Result ID : 340907
Feature Id : Not reported
Hazard Release Id : 382280
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 19.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121673
Code : 7440-50-8
Substance Name : COPPER
Substance Abbrev. : Not reported
Substance Categ ID : 8464
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Substance Alias ID : 319296
Sub Alias Name : CU
Sampling Result ID : 337593
Feature Id : Not reported
Hazard Release Id : 382281
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 76.90
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge
Sampling Result ID : 340908
Feature Id : Not reported
Hazard Release Id : 382281
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 209.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340953
Feature Id : Not reported
Hazard Release Id : 382281
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 176.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Substance ID : 121639
Code : 7439-92-1
Substance Name : LEAD
Substance Abbrev. : Not reported
Substance Categ ID : 8466
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319256
Sub Alias Name : PB
Sampling Result ID : 340909
Feature Id : Not reported
Hazard Release Id : 382282
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (stockpiled soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 128.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stockpiled soils
Sampling Result ID : 340910
Feature Id : Not reported
Hazard Release Id : 382282
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 73.50
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge
Sampling Result ID : 340954
Feature Id : Not reported
Hazard Release Id : 382282
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867865

Minimum Concentration : .00
Max Concentration : 238.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121642
Code : 7439-96-5
Substance Name : MANGANESE
Substance Abbrev. : Not reported
Substance Categ ID : 8468
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319259
Sub Alias Name : MN
Sampling Result ID : 340911
Feature Id : Not reported
Hazard Release Id : 382283
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 19700.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340912
Feature Id : Not reported
Hazard Release Id : 382283
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 1180.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge
Sampling Result ID : 340955
Feature Id : Not reported
Hazard Release Id : 382283

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 4910.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at o/w separator outfall
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121643
Code : 7439-97-6
Substance Name : MERCURY
Substance Abbrev. : Not reported
Substance Categ ID : 8467
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319260
Sub Alias Name : HG
Substance Alias ID : 319261
Sub Alias Name : HYDRARGYRUM
Substance Alias ID : 319262
Sub Alias Name : LIQUID SILVER
Substance Alias ID : 319263
Sub Alias Name : QUICKSILVER
Sampling Result ID : 340913
Feature Id : Not reported
Hazard Release Id : 382284
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 2 to 10 feet bgs (subsurface soils)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : .47
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340956
Feature Id : Not reported
Hazard Release Id : 382284
Medium Code Id : 701
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : .61
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121755
Code : 7782-49-2
Substance Name : SELENIUM
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319488
Sub Alias Name : SE
Sampling Result ID : 340914
Feature Id : Not reported
Hazard Release Id : 382285
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 4.20
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340957
Feature Id : Not reported
Hazard Release Id : 382285
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Max Concentration : 1.50
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at stormwater overflow outfall pipe
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121654
Code : 7440-22-4
Substance Name : SILVER
Substance Abbrev. : Not reported
Substance Categ ID : 8470
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319274
Sub Alias Name : AG
Sampling Result ID : 340915
Feature Id : Not reported
Hazard Release Id : 382286
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 6.30
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340958
Feature Id : Not reported
Hazard Release Id : 382286
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 2.10
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at stormwater overflow pipe outfall
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Substance ID : 121677
Code : 7440-62-2
Substance Name : VANADIUM
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319300
Sub Alias Name : V
Sampling Result ID : 340916
Feature Id : Not reported
Hazard Release Id : 382287
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 347.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340959
Feature Id : Not reported
Hazard Release Id : 382287
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 206.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at stormwater overflow pipe outfall
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121679
Code : 7440-66-6
Substance Name : ZINC
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Create Date : Not reported
Substance Alias ID : 319302
Sub Alias Name : ZN
Sampling Result ID : 340917
Feature Id : Not reported
Hazard Release Id : 382288
Medium Code Id : 703
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 4 inches to 4 feet bgs (subsurface soil)
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 246.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Subsurface soils - fill
Sampling Result ID : 340918
Feature Id : Not reported
Hazard Release Id : 382288
Medium Code Id : 702
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1999-06-08 00:00:00
End Date : 1999-06-08 00:00:00
Minimum Concentration : .00
Max Concentration : 494.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Stormwater collection system sludge
Sampling Result ID : 340960
Feature Id : Not reported
Hazard Release Id : 382288
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 110
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 678.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Update By: Not reported
Substance ID : 120952
Code : 120-12-7
Substance Name : ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8473
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316696
Sub Alias Name : ANTHRACIN
Substance Alias ID : 316697
Sub Alias Name : GREEN OIL
Substance Alias ID : 316698
Sub Alias Name : PARANAPHTHALENE
Substance Alias ID : 316699
Sub Alias Name : TETRA OLIVE N2G
Sampling Result ID : 340925
Feature Id : Not reported
Hazard Release Id : 382289
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 98.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 121195
Code : 206-44-0
Substance Name : FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8491
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317398
Sub Alias Name : BENZACENAPHTHENE,1,2-
Substance Alias ID : 317399
Sub Alias Name : BENZO(jk)FLUORENE
Sampling Result ID : 340927
Feature Id : Not reported
Hazard Release Id : 382290
Medium Code Id : 701
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 440.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 120942
Code : 117-84-0
Substance Name : DI-n-OCTYL PHTHALATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316662
Sub Alias Name : BENZENEDICARBOXYLIC ACID,1,2-, DIOCTYL ESTER
Substance Alias ID : 316663
Sub Alias Name : BENZENEDICARBOXYLIC ACID,o-, DIOCTYL ESTER
Substance Alias ID : 316664
Sub Alias Name : DIOCTYL PHTHALATE,n-
Substance Alias ID : 316665
Sub Alias Name : DIOCTYL-o-BENZENEDICARBOXYLATE
Substance Alias ID : 316666
Sub Alias Name : DIOCTYL-o-PHTHALATE
Sampling Result ID : 340933
Feature Id : Not reported
Hazard Release Id : 382291
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 630.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121192

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Code : 205-99-2
Substance Name : BENZO(b)FLUORANTHENE
Substance Abbrev. : Not reported
Substance Categ ID : 8477
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317390
Sub Alias Name : B(b)F
Substance Alias ID : 317391
Sub Alias Name : BENZ(e)ACEPHENANTHRYLENE
Substance Alias ID : 317392
Sub Alias Name : BENZFLUORANTHENE,3,4-
Substance Alias ID : 317393
Sub Alias Name : BENZOFLUORANTHENE,2,3-
Substance Alias ID : 317394
Sub Alias Name : BENZOFLUORANTHENE,3,4-
Sampling Result ID : 340934
Feature Id : Not reported
Hazard Release Id : 382292
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 2600.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121374
Code : 50-32-8
Substance Name : BENZO(a)PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8476
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318559
Sub Alias Name : B(a)P
Substance Alias ID : 318560
Sub Alias Name : BENZOPYRENE,3,4-
Substance Alias ID : 318561
Sub Alias Name : BENZPYRENE,3,4-
Substance Alias ID : 318562
Sub Alias Name : BP
Sampling Result ID : 340936

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Feature Id : Not reported
Hazard Release Id : 382293
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 1200.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 121176
Code : 193-39-5
Substance Name : INDENO(1,2,3-cd)PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8493
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317339
Sub Alias Name : PHENYLENEPYRENE,2,3-
Substance Alias ID : 317340
Sub Alias Name : PHENYLENEPYRENE,o-
Sampling Result ID : 340937
Feature Id : Not reported
Hazard Release Id : 382294
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 960.00
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121415
Code : 53-70-3
Substance Name : DIBENZO(a,h)ANTHRACENE

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Substance Abbrev. : Not reported
Substance Categ ID : 8499
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318667
Sub Alias Name : DB(a,h)A
Substance Alias ID : 318668
Sub Alias Name : DIBENZ(a,h)ANTHRACENE
Substance Alias ID : 318669
Sub Alias Name : DIBENZANTHRACENE,1,2-5,6-
Substance Alias ID : 318670
Sub Alias Name : DIBENZANTHRACENE,1,2-5,6-
Sampling Result ID : 340938
Feature Id : Not reported
Hazard Release Id : 382295
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 340.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at pacific Car Crushing pond outfall
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121167
Code : 191-24-2
Substance Name : BENZO(ghi)PERYLENE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317305
Sub Alias Name : B(ghi)P
Substance Alias ID : 317306
Sub Alias Name : BENZOPERYLENE,1,12-
Substance Alias ID : 317307
Sub Alias Name : BENZPERYLENE,1,12-
Sampling Result ID : 340939
Feature Id : Not reported
Hazard Release Id : 382296
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 970.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121304
Code : 319-86-8
Substance Name : BHC,delta-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318368
Sub Alias Name : BENZENE HEXACHLORIDE,delta-
Substance Alias ID : 318369
Sub Alias Name : HCH,delta-
Substance Alias ID : 318370
Sub Alias Name : LINDANE,delta-
Sampling Result ID : 340940
Feature Id : Not reported
Hazard Release Id : 382297
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 5.80
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121295
Code : 309-00-2
Substance Name : ALDRIN
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867865

Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318338
Sub Alias Name : ALDREX
Substance Alias ID : 318339
Sub Alias Name : ALDRITE
Substance Alias ID : 318340
Sub Alias Name : ALDROSOL
Substance Alias ID : 318341
Sub Alias Name : HEXACHLOROHEXAHYDRO-endo-exo-DIMETHANONAPHTHALENE
Substance Alias ID : 318342
Sub Alias Name : HHDN
Substance Alias ID : 318343
Sub Alias Name : OCTALENE
Substance Alias ID : 318344
Sub Alias Name : SEEDRIN LIQUID
Sampling Result ID : 340941
Feature Id : Not reported
Hazard Release Id : 382298
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 5.40
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-10-12 00:00:00
Update By: Not reported
Substance ID : 120814
Code : 1024-57-3
Substance Name : HEPTACHLOR EPOXIDE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316215
Sub Alias Name : VELSICOL 53-CS-17
Sampling Result ID : 340942
Feature Id : Not reported
Hazard Release Id : 382299
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Sample Depth : 0 to 6 inches bgs
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 2.40
Last Update By : sxf
Last Updated On : 1999-12-10 00:00:00
Sample Comment : Drainage ditch sediments
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121313
Code : 33213-65-9
Substance Name : ENDOSULFAN II
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318398
Sub Alias Name : ENDOSULFAN,beta-
Substance Alias ID : 318399
Sub Alias Name : THIODAN II
Sampling Result ID : 340943
Feature Id : Not reported
Hazard Release Id : 382300
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 14.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 120821
Code : 1031-07-8
Substance Name : ENDOSULFAN SULFATE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 316229
Sub Alias Name : BENZOEPIN SULFATE

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Substance Alias ID : 316230
Sub Alias Name : THIODAN SULFATE
Sampling Result ID : 340945
Feature Id : Not reported
Hazard Release Id : 382301
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 38.00
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Sediments at Pacific Car Crushing pond overflow
Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121373
Code : 50-29-3
Substance Name : DDT,p,p'-
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 318555
Sub Alias Name : BIS(p-CHLOROPHENYL)-2,2,2-TRICHLOROETHANE,1,1-
Substance Alias ID : 318556
Sub Alias Name : CHLOROPHENOTHANE
Substance Alias ID : 318557
Sub Alias Name : DICHLORODIPHENYLTRICHLOROETHANE
Substance Alias ID : 318558
Sub Alias Name : ETHANE,1,1,1-TRICHLORO-2,2-BIS(p-CHLOROPHENYL)-
Sampling Result ID : 340946
Feature Id : Not reported
Hazard Release Id : 382302
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 4.80
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number
Database(s)

1006867865

Quant. Released: Unknown
Date: Unknown
Update Date: 1999-12-13 00:00:00
Update By: Not reported
Substance ID : 121633
Code : 7421-93-4
Substance Name : ENDRIN ALDEHYDE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : 340948
Feature Id : Not reported
Hazard Release Id : 382303
Medium Code Id : 701
Substance Id : Not reported
Unit Code : 73
Observation : True
Owner Operator : False
Lab Data : True
Sample Depth : 0 to 6 inches bgs (sediments)
Start Date : 1999-06-24 00:00:00
End Date : 1999-06-24 00:00:00
Minimum Concentration : .00
Max Concentration : 4.80
Last Update By : sxf
Last Updated On : 1999-12-13 00:00:00
Sample Comment : Drainage ditch sediments (as endrin ketone)

Alias Name: Not reported
Investigation Status: 207

NARR:

NARR ID: 5736902
NARR Code : Site Contacts
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR Comments Curtis D. Zelmer, former owner/operator, 8311 N Dana, Portland 97203, (503) 283-6785. Curtis Zelmer began constructing an RV/boat storage facility at the site in July 1997. (12/10/99) Site now owned by Rand Klemp, 724 N Columbia, Suite 212, 503-240
- 1981; site currently operated by Alex Berkovich and Alex Schlaen, 21st Century Towing, 503-283-7788.
Known/documented on-site releases of used motor oil and antifreeze. Documented on-site burning of tires and other automotive "wastes." Likely releases of gasoline/BTEX, and PAHs. Possible releases of lead, PCBs, mercury, cadmium, asbestos, zinc, cop per, phthalates, Freon, brake fluid, chromium, and other automotive-associated hazardous substances. Discharges to on-site soils. Possible migration to shallow groundwater and Columbia Slough. (1/28/98 SMF/SAS) Tire burning may have occurred during earlier operations on adjoining Tax Lot 25. June 1999 EPA SI sampling found

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

soils and sediments contaminated with PAHs, metals, phthalates, PCE, BTEX, ethylene glycol, and pesticides. Soils also contaminated with PCBs. Solid Waste Permit File SW-WTP-90-23; Solid Waste Permit File SW-WTP-89-178; September 1999 EPA Site Inspection report. Prior to July 1997, an unpaved soil and gravel lot used for auto wrecking and "you-pull-it" parts-salvaging operations. Site paved in July/August 1997. Located between N Columbia Boulevard and UPRR tracks. Columbia Slough located 220 feet to east. R/V/boat storage buildings scheduled to be built on site in 1997. (1/28/98 SMF/SAS) Early operations (1974-1988), including tire burning, may have occurred on adjoining Tax Lot 25, which is currently being bought from Mr. Zelmer by Tony D. Sneider. Used motor oil and antifreeze. Likely gasoline/BTEX and PAHs. Possible lead, PCBs, cadmium, chromium, zinc, asbestos, mercury, Freon, phthalates, and other auto-associated wastes. EPA SI (June 1999) detected PAHs, metals, BTEX, phthalates, ethylene glycol, pesticides, and PCBs. Used motor oil and antifreeze releases have been documented at the site, along with observed burning of tires/other automotive wastes and other activities. A pollution complaint to the City of Portland alleged that cars crushed at the site in April 1997 had gasoline within their gas tanks. Prior to July/August 1997, site was not paved - surface was exposed soils and gravel. Uncontrolled stormwater runoff was to off-site ditch along UPRR rail bed. Soil and shallow groundwater contamination are a concern. Site's proximity to Columbia Slough suggest the site is a potential source of sediment contamination within the slough. It is unclear if nearby historic residences have active wells. Industrial/commercial. Nearby residential property. Columbia Slough near. Located between N Columbia Boulevard and UPRR tracks. Columbia Slough is as near as 220 feet to the east. Residential property is located within 250 feet to the northeast. (1/28/98 SMF/SAS) Adjoining Tax Lot 25 may have been the site of earlier (1974 to 1988) auto wrecking activities (and tire burning) by Mr. Zelmer. Automotive wrecking and "you-pull-it" parts salvaging operations; 1997 car crushing operations; historic (1974-) on-site tire (and other automotive wastes) burning. Copper-smelting activities reportedly conducted on-site. (1/28/98; SMF/SAS) The tire and other waste-burning activities may have been conducted on the adjoining Tax Lot 25. Site is paved (1997/1998) and is currently used by 21st Century Towing as an auto towing/storage lot. On-site soils (site was paved during July/August 1997). Probable off-site soils along UPRR tracks. Possible shallow groundwater and Columbia Slough surface water and sediments. EPA SI found contamination in surface soils, subsurface soils, stockpile d soils, and sediments. Curtis D. Zelmer, 8311 N Dana, Portland 97203, 503-283-6785, since 1974. (1/28/98 SMF/SAS) Mr. Zelmer owned and operated Rivergate Auto Wrecking since 1974, although activities prior to 1974 may have been conducted on adjoining Tax Lot 25. Site owned by Rand Klemp, as of 12/10/99. Observed/documented on-site soil contamination. Groundwater may be very shallow at site. Possible groundwater contamination. Possible direct contact along UPRR tracks. (Site paved July/August 1997). Possible direct contact at unpaved earthen berm along site's eastern boundary. Possible contaminant discharges to Columbia Slough (surface water and sediments). Nearby residences may have wells. Concern for

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

possible contaminated groundwater consumption, threat to aquatic life in slough, and human consumption of fish caught from slough. (12/13/99 SMF/SAS) Most of site paved; unpaved portions represent less than 5 percent of site. Federal screening August 1997; XPA recommended (medium priority). EPA conducted SI in September 1999. Known used oil and antifreeze releases. Possible releases of other automotive-related wastes (gasoline/BTEX, PAHs, brake fluid, asbestos, PCBs, mercury, cadmium, zinc, chromium, Freon, lead, phthalates, burned tires, etc). PCBs and pesticides also detected at site during EPA SI (6/99). Possible human consumption of contaminated groundwater; possible direct contact with contaminated soils; possible threat to persons consuming fish caught from Columbia Slough. Data from EPA SI (6/99) indicate that: Arsenic and chromium in site soils and sediments, benzene in soils, and benzo(a)pyrene in sediments exceed acceptable industrial risk levels. In addition, benzo(a)anthracene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno (1,2,3-c,d)pyrene in sediments exceed acceptable residential risk concentrations. Arsenic and chromium in site soils and sediments, and benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene in sediments exceed Industrial Soil Cleanup Levels. In addition, benzene and dieldrin in soils, and lead, benzo(a)anthracene, indeno(1,2,3-c,d) pyrene in sediments exceed Soil Cleanup Levels for residential soils. There may be shallow domestic wells within 250 feet of site. Groundwater may discharge to the Columbia Slough - possible impacts to aquatic life and to humans consuming fish caught from the Slough.

NARR ID: 5736903
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736904
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736905
NARR Code : General Site Description
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736906
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736907
NARR Code : Project Issues Summary
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867865

Updated Date: 2002-12-17 08:50:04
NARR ID: 5736908
NARR Code : Land Use (Current/Reasonably Likely)
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736909
NARR Code : Site Location
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736910
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736911
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736912
NARR Code : Site Ownership
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736913
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736914
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736915
NARR Code : Substances of Concern
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736916
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736917
NARR Code : Water Use (Current/Reasonably Likely)

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133322 FACA Id : 38619
Site Name: Rivergate Auto Wrecking - U Pull It Division
County Code : 26.00
Owner Name: 21st Century Towing, Inc.
Owner Address: 12104 N Columbia BLVD
Portland, 97203

Lat/Long 45.6104 / -122.7599

Owner Code: LIS

Owner Site Num: 133323 FACA Id : 38619

Site Name: Rivergate Auto Wrecking - U Pull It Division

County Code : 26.00

Owner Name: Rivergate Auto Wrecking U-Pull-It Divn

Owner Address: 12104 N Columbia BLVD

Portland, 97203

Lat/Long 45.6104 / -122.7599

Owner Code: LIS

PERMIT:

Permit Number: Not reported Permit Type: Not reported

Permit Agency: Not reported

Permit Comments: Not reported

ADMIN ACT:

Admin ID: 709994 Action ID: 9421
Agency ID : Dept Of Environmental Quality Start Date: 1998-07-09 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: gmw Update Date: 1998-07-13 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 631
Comments : Not reported

Admin ID: 710325 Action ID: 9425
Agency ID : Dept Of Environmental Quality Start Date: 1997-08-22 00:00:00
Further Action: Not reported Region ID: Northwestern Region
Complete Date: Not reported Substance Code: SAS
Rank Value: 0 Cleanup Flag: False
Updated By: kpd Update Date: 1997-12-10 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 349
Comments : Federal Screening associated with Columbia Slough site evaluations

Admin ID: 710326 Action ID: 9510
Agency ID : Dept Of Environmental Quality Start Date: 1997-08-27 00:00:00
Further Action: Medium Region ID: Northwestern Region
Complete Date: 258 Substance Code: SAS
Rank Value: 79 Cleanup Flag: False
Updated By: dmc Update Date: 1997-10-06 00:00:00
Created By: Not reported Create Date: 2002-12-17 08:50:22.
Employee Id: 349
Comments : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Admin ID:	710327	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-27 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-12-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	710357	Action ID:	9465
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-09-11 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-12-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	710894	Action ID:	9459
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-22 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-12-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	710973	Action ID:	9438
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-11-20 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-12-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		

Admin ID:	711119	Action ID:	9437
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-26 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-12-10 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	707573	Action ID:	9512
Agency ID :	Environmental Protection Agency	Start Date:	1998-10-11 00:00:00
Further Action:	Not reported	Region ID:	Not reported
Complete Date:	Not reported	Substance Code:	Not reported
Rank Value:	0	Cleanup Flag:	False
Updated By:	gmw	Update Date:	1999-11-01 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867865

Created By: Not reported
Employee Id: Not reported
Comments : Combined PA/SI

Create Date: 2002-12-17 08:50:22.

Admin ID: 707574
Agency ID : Environmantal Protection Agency
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: Not reported
Comments : Not reported

Action ID: 9444
Start Date: 1999-10-25 00:00:00
Region ID: Not reported
Substance Code: Not reported
Cleanup Flag: False
Update Date: 1999-11-01 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712184
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 301
Comments : Not reported

Action ID: 9424
Start Date: 1997-06-10 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1997-06-10 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Refrence Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

1006867865

Qtr Section Coord : Not reported
Address : Not reported
 Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133322
Operation Status :Active
Common Name : 21st Century Towing, Inc.
Yrs of Operation : August 1997 - present
Comments : August 1997 - present
Updated By : jmw
Updated Date : 2001-06-04 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196879
SIC Code: 5013
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operations SIC Id:196880
SIC Code: 7549
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operations SIC Id:196881
SIC Code: 4225
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

Operation Id : 133323
Operation Status :Inactive
Common Name : Rivergate Auto Wrecking U-Pull-It Divn
Yrs of Operation : 1974 to 1997
Comments : 1974 to 1997
Updated By : you-pull-i
Updated Date : auto wrecking yard.

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIVERGATE AUTO WRECKING - U PULL IT DIVISION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006867865

Operations SIC Id:196526
SIC Code: 5015
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

G30
NE
1/2-1
4898 ft.

RIVERGATE AUTO WRECKING - U PULL IT DIVI
12104 N COLUMBIA BLVD
PORTLAND, OR 97203

OR CRL S104495026
N/A

Site 2 of 4 in cluster G

Relative:
Higher

OR CRL:

Actual:
45 ft.

Facility ID: 2056
Location ID: 38619
Status Code: LIS
Facility Status: State Expanded Preliminary Assessment recommended (XPA)
Lat/Long: 45.6104 / -122.7599

G31
NE
1/2-1
4901 ft.

12122 N COLUMBIA BLVD
PORTLAND, OR 97203

SHWS - ECSI S104061403
OR HAZMAT N/A

Site 3 of 4 in cluster G

Relative:
Higher

ECSI:

Actual:
44 ft.

State ID Number: 2057
Study Area: False
Cercdis ID: Not reported
Size: Appr 6.25 acres
Orphan: False
Lat/Long: 45.6110 / -122.759
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 36
Legislative : 36
FACA ID : 31333
Update Date : 2004-01-14 14:55:25.
Created Time : 1997-06-10 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: TL 62 of TL B&C Ramsey Villa
NPL: False
Region ID: 2
Tax Lots: TL 62 of TL B&C Ramsey Villa
Township Zone: N
Range Zone: W
Qtr Section: CB
Further Action: 256
Score Value: 81
Created Date: kpd

HAZ RELEASED:

Quant. Released: Not reported
Date: Not reported
Update Date: 2000-02-10 00:00:00
Update By: Not reported

Substance ID : 121462
Code : 56-55-3
Substance Name : BENZO(a)ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8475
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318790
Sub Alias Name : BENZ(a)ANTHRACENE
Substance Alias ID : 318791
Sub Alias Name : BENZANTHRACENE,1,2-
Substance Alias ID : 318792
Sub Alias Name : BENZANTHRENE

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

(Continued)

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Substance Alias ID : 318793
Sub Alias Name : BENZOANTHRACENE
Substance Alias ID : 318794
Sub Alias Name : BENZPHENANTHRENE,2,3-
Substance Alias ID : 318795
Sub Alias Name : NAPHTHANTHRACENE
Substance Alias ID : 318796
Sub Alias Name : TETRAPHENE
Sampling Result ID : 339914
Feature Id : Not reported
Hazard Release Id : 378789
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2000-08-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-10-02 00:00:00
Sample Comment : 120 mg/kg
Quant. Released: Not reported
Date: Not reported
Update Date: 2000-09-21 00:00:00
Update By: Not reported
Substance ID : 121374
Code : 50-32-8
Substance Name : BENZO(a)PYRENE
Substance Abbrev. : Not reported
Substance Categ ID : 8476
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318559
Sub Alias Name : B(a)P
Substance Alias ID : 318560
Sub Alias Name : BENZOPYRENE,3,4-
Substance Alias ID : 318561
Sub Alias Name : BENZPYRENE,3,4-
Substance Alias ID : 318562
Sub Alias Name : BP
Sampling Result ID : 339639
Feature Id : Not reported
Hazard Release Id : 379002
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2000-08-01 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

(Continued)

S104061403

End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-09-21 00:00:00
Sample Comment : 77 mg/kg
Quant. Released: Not reported
Date: Not reported
Update Date: 2000-09-21 00:00:00
Update By: Not reported
Substance ID : 121415
Code : 53-70-3
Substance Name : DIBENZO(a,h)ANTHRACENE
Substance Abbrev. : Not reported
Substance Categ ID : 8499
Substance Sub Categ : Semi-volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318667
Sub Alias Name : DB(a,h)A
Substance Alias ID : 318668
Sub Alias Name : DIBENZ(a,h)ANTHRACENE
Substance Alias ID : 318669
Sub Alias Name : DIBENZANTHRACENE,1,2-5,6-
Substance Alias ID : 318670
Sub Alias Name : DIBENZANTHRACENE,1,2-5,6-
Sampling Result ID : 339641
Feature Id : Not reported
Hazard Release Id : 379003
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2000-08-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-10-02 00:00:00
Sample Comment : 8.5 mg/kg
Quant. Released: Not reported
Date: Not reported
Update Date: 2000-09-21 00:00:00
Update By: Not reported
Substance ID : 120883
Code : 108-88-3
Substance Name : TOLUENE
Substance Abbrev. : Not reported
Substance Categ ID : 8520
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S104061403

Substance Alias ID : 316466
Sub Alias Name : BENZENE,METHYL-
Substance Alias ID : 316467
Sub Alias Name : METHACIDE
Substance Alias ID : 316468
Sub Alias Name : METHYLBENZENE
Substance Alias ID : 316469
Sub Alias Name : METHYLBENZOL
Substance Alias ID : 316470
Sub Alias Name : PHENYLMETHANE
Substance Alias ID : 316471
Sub Alias Name : TOLUOL
Sampling Result ID : 339640
Feature Id : Not reported
Hazard Release Id : 379004
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2000-08-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-09-21 00:00:00
Sample Comment : 1.4 mg/kg
Quant. Released: Not reported
Date: Not reported
Update Date: 2000-09-21 00:00:00
Update By: Not reported
Substance ID : 121639
Code : 7439-92-1
Substance Name : LEAD
Substance Abbrev. : Not reported
Substance Categ ID : 8466
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319256
Sub Alias Name : PB
Sampling Result ID : 339642
Feature Id : Not reported
Hazard Release Id : 379005
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2000-08-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S104061403

Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-09-21 00:00:00
Sample Comment : 1,320 mg/kg total
Sampling Result ID : 339643
Feature Id : Not reported
Hazard Release Id : 379005
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2000-08-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-09-21 00:00:00
Sample Comment : 485 ug/L total
Quant. Released: Not reported
Date: Not reported
Update Date: 2000-09-21 00:00:00
Update By: Not reported
Substance ID : 121671
Code : 7440-47-3
Substance Name : CHROMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8462
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318145
Sub Alias Name : CHROMIUM, INORGANIC
Substance Alias ID : 319294
Sub Alias Name : CHROMIUM, TOTAL
Sampling Result ID : 339644
Feature Id : Not reported
Hazard Release Id : 379006
Medium Code Id : 703
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 2000-08-01 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : jmw
Last Updated On : 2000-09-21 00:00:00
Sample Comment : 2,160 mg/kg
Quant. Released: Unknown
Date: 1980 to present

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S104061403

Update Date: 1997-03-09 00:00:00
Update By: Not reported
Substance ID : 122015
Code : ECD282
Substance Name : OIL - WASTE
Substance Abbrev. : Not reported
Substance Categ ID : 8541
Substance Sub Categ : Petroleum Related Releases for OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : Not reported
Sub Alias Name : Not reported
Sampling Result ID : Not reported
Feature Id : Not reported
Hazard Release Id : Not reported
Medium Code Id : Not reported
Substance Id : Not reported
Unit Code : Not reported
Observation : Not reported
Owner Operator : Not reported
Lab Data : Not reported
Sample Depth : Not reported
Start Date : Not reported
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : Not reported
Last Updated On : Not reported
Sample Comment : Not reported

Alias Name: Northwest Recycling, Inc.
Portland Auto Wrecking
Investigation Status: 207

NARR:

NARR ID: 5736918
NARR Code : Site Contacts
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments The facility has been a "you-pull-it" auto salvaging and full-time auto crushing operation since 1980. Automotive fluids discharged during auto crushing activities drain to a 0.5 acre stormwater holding pond located along the eastern property line.
The pond is equipped with an oil/water separator, an oil skimmer, and an oil-absorbing boom. When visited by SAS on July 23, 1997, the northeastern end of the pond was covered with free product waste oil, and soils around the pond were oil-saturated
. Surface water levels within the pond are controlled with several bottom-feeding siphon pipes which discharge excess water to the land surface at the southeast corner of the pond. Runoff presumably discharges to a ditch along the UPRR railroad tracks.
Leonard F. Wilke, Northwest Recycling, Inc., DBA Pacific Car Crushing / Portland Auto Wrecking, 12122 N Columbia Blvd, Portland 97203, (503) 286-3397 or (503) 286-6262. Home: 8035 S Vale Garden Rd, Canby, OR 97013. Mr. Wilke is currently

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

(Continued)

S104061403

buying the site from LeRoy E. and David M. Ellett, who previously operated a wrecking yard at the site. LeRoy Ellett: 1630 NE Gertz Rd, Portland 97211, (503) 285-9514. Waste motor oil (PAHs). Likely other auto-associated hazardous substances such as antifreeze (ethylene glycol), asbestos, lead, cadmium, mercury, chromium, Freon, brake fluid, PCBs, copper, zinc, etc. Observations by inspectors from DEQ's Stormwater Program, and City of Portland's Bureau of Environmental Services, June 1996; observations and photos from July 1997 SAS site visit. The site is located at 12122 N Columbia Boulevard southwest of the UPRR railroad tracks and the Columbia Slough. The Slough lies within 85 feet of the site's eastern boundary. The site has been largely paved since 2001. Soils around stormwater holding pond saturated with waste oil. Contaminants presumably include automotive-associated hazardous substances (gasoline/BTEX, lead, cadmium, chromium, mercury, PCBs, PAHs, Freon, brake fluid, antifreeze, zinc, copper, asbestos, nickel, phthalates, etc). Apparent oil-saturated soils around the site's stormwater holding pond, along with the facility's method of collecting waste automotive fluids from its car-crushing activities, suggest potentially substantial subsurface contamination around the holding pond, car-crushing operation, and ditch along the UPRR railroad tracks. Groundwater elevations at the neighboring Mt. Hood Metals facility (ECSI #2058) suggest that the pond may be leaking water to the subsurface. Local groundwater contamination appears likely. The site is bordered by a couple of residential properties. It is unclear if these residences have drinking water wells. The site's proximity to the Columbia Slough suggests that site contaminants may be reaching the slough. Slough sediment analyses indicate likely releases of PAHs and toxic metals in the area of this site, which may be affecting aquatic life within the slough. Industrial/commercial. Site is bordered by residential properties, and Columbia Slough lies as near as 85 feet from the site. Located in North Portland, between N Columbia Boulevard and UPRR railroad tracks. Columbia Slough lies within 85 feet of the site's eastern edge. Waste automotive fluids are discharged to an on-site stormwater holding pond during car crushing operations. Automotive fluids are probably also lost to the site's soil and gravel surface during "you-pull-it" auto parts salvaging operations. Fluids discharged to the holding pond appear to have saturated surrounding soils. Contaminated water within the pond may be leaking to the subsurface. Pond overflows are directed off-site, onto adjoining UPRR property, and possibly onto the adjoining Rivergate Auto Wrecking site (ECSI# 2056). Surface waters within the site's stormwater holding pond. Soils surrounding the site's holding pond. Surface soils throughout the site. Likely groundwater contamination. Likely off-site soils and groundwater contamination. Site releases may contribute to surface water and sediment contamination within Columbia Slough. Site is currently being sold (under contract) to operator Leonard F. Wilke by LeRoy E. and David M. Ellett, previous (prior to 1980) auto wrecking yard owners/operators. Direct contact with site contaminants is likely. Concern for potential human consumption of possible contaminated groundwater. Possible migration of site contaminants to nearby Columbia Slough: sediment contamination within the slough may be affecting aquatic life. Concern for potential human consumption of contaminated fish

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

(Continued)

S104061403

tissue from the slough.

(4/8/99 MDK/SRP) The site was assigned to the Site Response Program (SRP) 3/1/99. The initial PRP notice letter was sent 4/9/99. DEQ intends to have a Consent Order in place by third quarter 1999. (1/3/00 MDK/SRP) A consent order is in effect as of

9/2/99. A draft Site Investigation Workplan is to be submitted by 2/2/00.

(4/12/00 MDK/SRP) A SI workplan was submitted, reviewed and then approved by DEQ 2/24/00. Field work will begin 4/17/00 and the SI report is expected to be submitted by 7/1/00

. Based on a site visit to a residential property adjacent to the site, where DEQ observed flooding of the property by stormwater runoff from the Pacific Car site, DEQ has requested that the SI include surface soil sampling on the residential proper

ty. (9/20/00 MDK/SRP) A draft FSI Report was submitted 8/31/00 and is under review. (5/29/01 MDK/SRP) A data gap work plan has been approved and field work will begin in June 2001. (11/16/01 MDK/SRP) A project meeting was held 9/13/01, to discuss th

e data gap work results and determine how the site SI and RA would be completed.

A revised FSI and RA for soil, air and surface water is to be submitted by 11/28/01. Additional groundwater monitoring will be conducted through February 2002, and an a

ddendum to the FSI/RA for groundwater will be submitted in second quarter 2002.

The site storm retention pond has been rebuilt, including removal of contaminated sediments, and shifting the footprint of the pond so it is completely on site. (5/8/02

MDK/SRP) The FSI for soil was submitted 11/28/01, and review comments issued 5/8/02. A revised schedule will be submitted by 5/30/02 for finalization of the FSI for soil and submittal of the draft FSI for groundwater. (7/8/03 MDK/C&ER) DEQ approved

the Focused Site Investigation, soils Operable Unit Report, which includes a risk assessment, on May 12, 2003. A work plan for a limited soil removal was submitted on June 24, 2003, and is under review. The storm water retention ponds were reconst

ructed and sediment removed and PCB-containing sediments disposed per state and federal PCB requirements. A draft Focused Site Investigation, Groundwater Operable Unit Report, including a risk assessment was submitted on November 20, 2001. The rep

ort is under review. A decision on whether a No Further Action (NFA) is appropriate for this site will be made during August 2003.

Waste oil, and other auto-related hazardous substances, including PAHs, gasoline (BTEX), lead, cadmium, chromium, mercury, PCBs, asbestos, Freon, phthalates, copper, zinc, nickel, antifreeze (ethylene glycol), brake fluid, etc.

Direct contact with contaminated soils likely. Concern for potential human consumption of contaminated groundwater. Concern for potential human consumption of contaminated fish tissue from slough.

Automotive fluids discharged to site's stormwater holding pond are probably not being contained: soils surrounding pond are oil-saturated; pond may be losing water to the subsurface; contaminants discharged to pond probably dissolve in surface water

; pond overflow may contaminate soils/groundwater on adjoining properties (Rivergate Auto Wrecking; UPRR right-of-way); wastes discharged to surface soils in other areas of the site may be free to migrate to groundwater.

Groundwater use unclear: adjoining residential properties may have wells.

Potential contaminated groundwater (or contaminated runoff) could discharge to the Columbia Slough and affect aquatic life within the Slough, as well as those who eat fish cau

ght from the Slough.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

(Continued)

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NARR ID: 5736919
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736920
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736921
NARR Code : General Site Description
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: JWAGGY
Updated Date: 2003-07-29 10:18:00
NARR ID: 5736922
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736923
NARR Code : Project Issues Summary
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736924
NARR Code : Land Use (Current/Reasonably Likely)
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736925
NARR Code : Site Location
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736926
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736927
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736928
NARR Code : Site Ownership
Created By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

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Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736929
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736930
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: JWAGGY
Updated Date: 2003-07-29 10:23:56
NARR ID: 5736931
NARR Code : Substances of Concern
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736932
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736933
NARR Code : Containment Units
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736934
NARR Code : Water Use (Current/Reasonably Likely)
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5743935
NARR Code : Site History
Created By: JWAGGY
Create Date: 2003-07-29 10:18:09
Updated By: JWAGGY
Updated Date: 2003-07-29 10:18:09

ECWQ:

Owner Site Num: 133324
Site Name: Pacific Car Crushing
County Code : 26.00
Owner Name: Northwest Recycling, Inc.
Owner Address: 12122 N Columbia BLVD
Portland, 97203
Lat/Long 45.6110 / -122.7599
Owner Code: LIS

FACA Id : 31333

PERMIT:

Permit Number: Not reported

Permit Type: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

(Continued)

S104061403

Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 710075
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9438
Start Date: 1998-07-24 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-07-24 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710076
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9439
Start Date: 1998-07-24 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-07-24 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710328
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Federal Screening of Columbia Slough sites.

Action ID: 9425
Start Date: 1997-07-23 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-12-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705794
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 459
Comments : PRP notice letter sent on April 9, 1999.

Action ID: 9484
Start Date: 1999-09-02 00:00:00
Region ID: Northwestern Region
Substance Code: SRS
Cleanup Flag: False
Update Date: 2000-01-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 705796
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: JWAGGY
Created By: Not reported
Employee Id: 459
Comments : Not reported

Action ID: 9412
Start Date: 1999-09-02 00:00:00
Region ID: Northwestern Region
Substance Code: SRS
Cleanup Flag: False
Update Date: 2003-07-29 10:19:40.
Create Date: 2002-12-17 08:50:22.

Admin ID: 710329
Agency ID : Dept Of Environmental Quality
Further Action: High-Medium
Complete Date: 257

Action ID: 9503
Start Date: 1997-07-30 00:00:00
Region ID: Northwestern Region
Substance Code: SAS

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S104061403

Rank Value: 81
Updated By: jmd
Created By: Not reported
Employee Id: 349
Comments : Sampling/characterization recommended for site soils, groundwater, pond sediments, and off-site soils and groundwater.

Cleanup Flag: False
Update Date: 1998-04-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710330
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9498
Start Date: 1997-07-30 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-12-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710331
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9499
Start Date: 1997-07-30 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-12-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710892
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9459
Start Date: 1997-07-23 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-12-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 726939
Agency ID : Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: Not reported
Updated By: JWAGGY
Created By: JWAGGY
Employee Id: 459
Comments : Not reported

Action ID: 9486
Start Date: 1999-07-02 00:00:00
Region ID: Northwestern Region
Substance Code: SRS
Cleanup Flag: False
Update Date: 2003-07-29 10:19:22.
Create Date: 2003-07-29 10:19:22.

Admin ID: 711288
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9437
Start Date: 1997-07-29 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-12-29 00:00:00
Create Date: 2002-12-17 08:50:22.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

(Continued)

S104061403

Admin ID: 712185
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 301
Comments : Not reported

Action ID: 9424
Start Date: 1997-06-10 00:00:00
Region ID: Headquarters
Substance Code: SRS
Cleanup Flag: False
Update Date: 1999-04-08 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709222
Agency ID : Dept Of Environmental Quality
Further Action: High
Complete Date: 256
Rank Value: 81
Updated By: jmw
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9517
Start Date: 1998-02-17 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1999-04-08 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709284
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9467
Start Date: 1998-02-23 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-14 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709285
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 349
Comments : Not reported

Action ID: 9465
Start Date: 1998-02-23 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-04-14 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:
Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S104061403

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported
Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133324
Operation Status :Active
Common Name : Northwest Recycling, Inc.
Yrs of Operation : 1980 - present
Comments : 1980 - present
Updated By : gmw
Updated Date : 2002-12-03 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:196527
SIC Code: 5015
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

HAZMAT:

Facility ID: HM06-990305
Incident District: PORTLAND
Incident Day: Fri
Alarm Time: 12/30/99

Dept Resp: HAZMAT TEAM PORTLAND
Arrival Time: 12/30/99

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

(Continued)

S104061403

Back in Service: 12/30/99
Responsible Party: PORTLAND AUTO WRECKING

Company: PORTLAND AUTO WRECKING

12122 N COLUMBIA BLVD
PORTLAND, OR 97203

RP Phone: (503) 286-6262

RP Phone 2: Not reported

Scene Type: Not reported

Area Type: Not reported

Wind Direction: Not reported

Wind Speed: Not reported

WFair: True

Num U Desc: Not reported

Num U Fire: 1

Num U Local: 1

Num U State: 0

Num U Police: 1

Num U Public Wks: 0

Num U Amb: 0

Num U Agency: 0

Num U Federal: 0

Num U RR: 0

Num U Other: 0

Act Secure Area: True

Act Crowd Control: False

Act Hot Zone: True

Act on Site: False

Act Transport: False

Sol Com Vehicle: False

Mi Fuel: False

Chemical: DRUG LAB CHEMICALS

Num Cont 1: 5

Size Cont 1: 35

Num Cont 2: Not reported

Size Cont 2: Not reported

Num Cont 3: Not reported

Size Cont 3: Not reported

Num Cont 4: Not reported

Size Cont 4: Not reported

Num Cont 5: Not reported

Size Cont 5: Not reported

Amt Rsk G1: 0

Amt Rel G1: 0

Amt Rsk G2: 0

Amt Rel G2: 0

Amt Rsk G3: 0

Amt Rel G3: 0

Amt Rsk G4: 0

Amt Rel G4: 0

Amt Rsk G5: 0

Mu Chem Trec: False

Mu Ship Papers: False

Mu Placards: False

Mu On Scene Test: False

Mu Other Desc: Not reported

Vehical Plus: 0

Fixed Property: 0

Fire Inj: 0

Fire Death: 0

Fire Decon: 0

Fire Treat: 0

Fire Hospital: 0

Civ Inj: 0

Civ Death: 0

Civ Decon: 0

Civ Treat: 0

Civ Hospital: 0

Other Inj: 0

Other Death: 0

Other Decon: 0

Other Treat: 0

Other Hospital: 0

Person File: LEO E KRICK

Title Person File: LT

Agency: PORTLAND FIRE B

Agency ID: 03860

Num U Deq: 1

Inc Num Short: 990305

Hazmat Team: 06

Hazmat local: T

Hazmat State: F

Agency Phone: (503) 823-3856

ID Number: Not reported

OERS Number: Not reported

Dept Rsp 2: PORTLAND FIRE BUREAU

St Pub Road: False

St Pub Struct: False

St Pub Land: False

St Forest: False

St Other: False

St Pri Road: False

St Pri Struct: False

St Waterway: False

St Pri Land: True

A Industrial: True

A Residential: False

A Forest: False

A commercial: False

A Rural Agri: False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

(Continued)

S104061403

W Rain: False
W Snow Ice: False
W Sunny: False
Act Activate Oers: True
Act Exiting: False
Act Evcuate: False
Act Evaluate: False
Act Pub Info: False
Soi Drug Lab: True
Soi Fixed Facility: False
Soi Pipeline: False
Soi Aircraft: False
Soi Desc: F
Mi Cargo: False
Mi Waste Mat: True
Coi Normal Op: False
Coi Dur Storage: False
Coi Railcar: False
Coi Durmanuf: False
Coi Derailment: False
Coi Abandon: True
Coi Docked: False
Amt Rilb1: 0
Amt Rilb2: 0
Amt Rilb3: 0
Amt Rilb4: 0
Amt Rilb5: 0
A Other: F
Amt Rsk P1: 0
Amt Rsk P2: 0
Amt Rsk P3: 0
Amt Rsk P4: 0
Amt Rsk P5: 0
Mu Sfm Hazcom: False
Mu Text Book: F
Mu Resp Party: F
FD Id: -06
Incident Date: 04/30/99
Agency Report # : 99-17966
Hmb Cont Fire: False
In Route : 12/30/99
Date Added: Not reported
ID Number: 12122
Prefix: N
Suffix: BLVD
Street: COLUMBIA
Street Type: BLVD
Unit: Not reported
Hmb Caus Explo: False
Hmb Inert No React: True
Hmb Bec Airborne: False
Hmb Contam Area: False
Hmb Entered Water: False
Comments :

W Fog: False
W Other Desc: Not reported
Act Traffic: False
Act ID Hazmat: False
Act Decontam: True
Act Cleanup: True
Act Remote Haz: False
Soi Car: False
Soi Train: False
Soi Ship: False
Soi Other: F
Soi Other Desc: Not reported
Mi Product: False
Coi Dur Fire: False
Coi Excavation: False
Coi MVA: False
Coi Unauthor: False
Coi Dur Repair: False
Coi in Transit: False
Coi Mat not Rel: False
Amt Ricf1: 0
Amt Ricf2: 0
Amt Ricf3: 0
Amt Ricf4: 0
Amt Ricf5: 0
Num U State Ag: 0
Amt Rsk C1: 0
Amt Rsk C2: 0
Amt Rsk C3: 0
Amt Rsk C4: 0
Amt Rsk C5: 0
Mu Off Scene: True
Mu Other: False

Hmb Cause Fire: False

Hmb Cont Explo: False

PORTLAND FIRE BUREAU HAZMAT TEAM 6 RESPONDED TO THE LISTED ADDRESS AT THE REQUEST OF HAZMAT COORDINATOR BILL HENLE. ON ARRIVAL, WE FOUND 5-35 GALLON BAGS OF DRUG LAB WASTE CONTAINERS AND MATERIALS THAT HAD BEEN DUMPED ILLEGALLY OVERNIGHT IN A COMMERC

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

G32
NE
1/2-1
4901 ft.

PACIFIC CAR CRUSHING
12122 N COLUMBIA BLVD
PORTLAND, OR 97203

OR CRL
S103303291
N/A

Site 4 of 4 in cluster G

Relative:
Higher

OR CRL:

Facility ID: 2057
Location ID: 31333
Status Code: LIS
Facility Status: REMEDIAL INVESTIGATION
Lat/Long: 45.611 / -122.7599

Actual:
44 ft.

H33
NE
1/2-1
4927 ft.

BPA - ST. JOHNS SUBSTATION
12567 N COLUMBIA BLVD
PORTLAND, OR 97203

SHWS - ECSI
FINDS
1006854090
110014162930

Site 1 of 2 in cluster H

Relative:
Higher

FINDS:

Other Pertinent Environmental Activity Identified at Site:
Oregon Department of Environmental Quality

Actual:
47 ft.

ECSI:

State ID Number: 1858
Study Area: False
Cercdis ID: Not reported
Size: Not reported
Orphan: False
Lat/Long: 45.6138 / -122.763
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 35
Legislative : 35
FACA ID : 40402
Update Date : 1998-05-20 00:00:00
Created Time : 1996-04-25 00:00:00

Brown ID
Coordinator Supplier: Not reported
Tax Lots: Not reported
NPL: False
Region ID: 2
Tax Lots: Not reported
Township Zone: N
Range Zone: W
Qtr Section: Not reported
Further Action: 258
Score Value: 0
Created Date: jmd

HAZ RELEASED:

Quant. Released: unk.
Date: unk.
Update Date: 1996-04-26 00:00:00
Update By: Not reported

Substance ID : 121610
Code : 71-55-6
Substance Name : TRICHLOROETHANE,1,1,1-
Substance Abbrev. : Not reported
Substance Categ ID : 8521
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8552
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318151
Sub Alias Name : TCA,1,1,1-
Substance Alias ID : 319183
Sub Alias Name : BALTANA
Substance Alias ID : 319184

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BPA - ST. JOHNS SUBSTATION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006854090

Sub Alias Name : CHLOROTHENE
Substance Alias ID : 319185
Sub Alias Name : METHYLCHLOROFORM
Sampling Result ID : 342127
Feature Id : Not reported
Hazard Release Id : 380439
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-03-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 97.2 ppb
Sampling Result ID : 342694
Feature Id : Not reported
Hazard Release Id : 380439
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-06-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 123 ppb
Sampling Result ID : 342695
Feature Id : Not reported
Hazard Release Id : 380439
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-09-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 45.9 ppb
Sampling Result ID : 342696
Feature Id : Not reported
Hazard Release Id : 380439

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BPA - ST. JOHNS SUBSTATION (Continued)

Database(s)
EDR ID Number
EPA ID Number

1006854090

Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-12-17 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 105 ppb
Quant. Released: unk.
Date: unk.
Update Date: 1996-04-26 00:00:00
Update By: Not reported
Substance ID : 121701
Code : 75-35-4
Substance Name : DICHLOROETHYLENE,1,1-
Substance Abbrev. : Not reported
Substance Categ ID : 8512
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8553
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319364
Sub Alias Name : DICHLOROETHENE,1,1-
Substance Alias ID : 319365
Sub Alias Name : DICHLOROETHYLENE,asym-
Substance Alias ID : 319366
Sub Alias Name : ETHENE,1,1-DICHLORO-
Substance Alias ID : 319367
Sub Alias Name : VINYLIDENE CHLORIDE
Sampling Result ID : 342128
Feature Id : Not reported
Hazard Release Id : 380440
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-03-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 19.6 ppb

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BPA - ST. JOHNS SUBSTATION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1006854090

Sampling Result ID : 342691
Feature Id : Not reported
Hazard Release Id : 380440
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-06-20 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 26.8 ppb
Sampling Result ID : 342692
Feature Id : Not reported
Hazard Release Id : 380440
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-09-24 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 8.1 ppb
Sampling Result ID : 342693
Feature Id : Not reported
Hazard Release Id : 380440
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-12-17 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-02-28 00:00:00
Sample Comment : 26.7 ppb
Quant. Released: unk.
Date: unk.
Update Date: 1996-04-26 00:00:00
Update By: Not reported
Substance ID : 121700
Code : 75-34-3

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BPA - ST. JOHNS SUBSTATION (Continued)

1006854090

Substance Name : DICHLOROETHANE,1,1-
Substance Abbrev. : Not reported
Substance Categ ID : 8548
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319361
Sub Alias Name : ETHANE,1,1-DICHLORO-
Substance Alias ID : 319362
Sub Alias Name : ETHYLIDENE CHLORIDE
Substance Alias ID : 319363
Sub Alias Name : ETHYLIDENE DICHLORIDE
Sampling Result ID : 342129
Feature Id : Not reported
Hazard Release Id : 380441
Medium Code Id : 698
Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Not reported
Start Date : 1996-04-11 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1996-04-26 00:00:00
Sample Comment : 0.8 ppb
Quant. Released: unk.
Date: unk.
Update Date: 1997-03-28 00:00:00
Update By: Not reported
Substance ID : 121059
Code : 1336-36-3
Substance Name : PCBs
Substance Abbrev. : Not reported
Substance Categ ID : 8558
Substance Sub Categ : PCB Substances for the OSPIRG Report
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317029
Sub Alias Name : BIPHENYL,POLYCHLORO-
Substance Alias ID : 317030
Sub Alias Name : CHLORINATED BIPHENYL
Substance Alias ID : 317031
Sub Alias Name : CHLOROBIPHENYL
Substance Alias ID : 317032
Sub Alias Name : POLYCHLORINATED BIPHENYLs
Substance Alias ID : 317033
Sub Alias Name : POLYCHLOROBIPHENYL
Sampling Result ID : 342803
Feature Id : Not reported
Hazard Release Id : 380898
Medium Code Id : 703

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

BPA - ST. JOHNS SUBSTATION (Continued)

1006854090

Substance Id : Not reported
Unit Code : Not reported
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface
Start Date : 1990-09-25 00:00:00
End Date : Not reported
Minimum Concentration : Not reported
Max Concentration : Not reported
Last Update By : gmw
Last Updated On : 1997-03-28 00:00:00
Sample Comment : 12 ppm

Alias Name: Not reported
Investigation Status: 207

NARR:

NARR ID: 5735881
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments (GMW 3/27/97) BPA approached DEQ in April 1996 with information about low to moderate levels of several chlorinated solvents in an on-site well that at one time supplied drinking water to employees. The source of the TCA, DCE, and DCA is likely to be the past use of chlorinated solvents to clean electrical equipment over bare ground. Additionally, historic spills and releases of dielectric fluids caused significant concentrations of PCBs in shallow soil in many locations of the site. Beginning in 1984, BPA sampling results showed a number of hot spots in shallow soils, with PCB concentrations of up to 50,000 ppm. Following remedial action in September 1990, residual PCB levels on parts of the site were in the range of 0.05 to 12 ppm. Sampling reports for soil at site, dating back to 1984; groundwater sampling data from 1988; "Phase II Site Remediation, Bonneville Power Administration's St. Johns Substation," Riedel Environmental Services, 11/21/90. PCBs, 1,1,1-trichloroethane, 1,1-dichloroethylene, 1,1-dichloroethane. PCBs in soils caused by leaking capacitors that historically contained PCBs. According to BPA officials, past practices included the rinsing of these leaking capacitors with large quantities of solvents to desorb PCB-containing oils. These solvents were allowed to drain directly onto the ground. Direct-contact risks with PCBs are considered low because the 1990 remedial action removed soils with the highest PCB concentrations, and because the site has a perimeter fence that prevents public access onto the property. There are many wells recorded within 1 mile of the site, the great majority of which are monitoring wells (associated, for example, with the former St. Johns Landfill). There is a well on-site that BPA used in the past to supply drinking water to substation employees; however, the well is no longer used for this purpose, and BPA plans to abandon it in 1997. There are records of five other domestic wells within 0.5 mile of the site, although these were installed in the 1940s, and may no longer be used. Other wells within 1 mile are used for irrigation or industrial supply.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BPA - ST. JOHNS SUBSTATION (Continued)

EDR ID Number
EPA ID Number
Database(s)

1006854090

(GMW 3/28/97) In September 1990, BPA contracted for the excavation and off-site disposal of 342 tons of PCB-contaminated soil and 50 additional tons of broken-up concrete slabs. Confirmation sampling of soils from remediated areas showed residual PC

B levels of <0.05 ppm to 3.5 ppm, with most <1 ppm. In addition, there may be PCB contaminated soils up to about 12 ppm remaining beyond the edges of remediated areas, based on previous BPA sampling data. The chlorinated solvents in the on-site well

(which BPA plans to abandon) may have resulted from past solvent use and disposal at the site. Site Assessment recommends the following further actions:

1) a well survey to determine if shallow groundwater is used for domestic supply within 1 mile o

f the site; 2) an on-site characterization of VOCs in groundwater; and 3) an evaluation of PCB levels remaining in soils, applied against DEQ's Generic Remedy for PCBs. Further state action at the site is a medium priority.

NARR ID: 5735882
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735883
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735884
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735885
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5735886
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: GWISTAR
Updated Date: 2003-01-23 13:44:28

ECWQ:

Owner Site Num: 133158
Site Name: BPA - St. Johns Substation
County Code : 26.00
Owner Name: St. Johns Substation
Owner Address: 12567 N Columbia BLVD
Portland, 97203
Lat/Long 45.6138 / -122.7638
Owner Code: LIS

FACA Id : 40402

PERMIT:

Permit Number: Not reported

Permit Type: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BPA - ST. JOHNS SUBSTATION (Continued)

1006854090

Permit Agency: Not reported
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 710281
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 730
Comments: Not reported

Action ID: 9430
Start Date: 1997-06-16 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-08-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710282
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 730
Comments: Letter from James Meyer, BPA

Action ID: 9451
Start Date: 1997-08-08 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-08-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 710283
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 767
Comments: Not reported

Action ID: 9448
Start Date: 1997-08-26 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-03-26 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711170
Agency ID: Dept Of Environmental Quality
Further Action: 0
Complete Date: 0
Rank Value: 0
Updated By: GWISTAR
Created By: Not reported
Employee Id: 730
Comments: Not reported

Action ID: 9438
Start Date: 1997-12-10 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 2003-05-06 17:11:36.
Create Date: 2002-12-17 08:50:22.

Admin ID: 711822
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments: Not reported

Action ID: 9437
Start Date: 1997-03-21 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-03-28 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711825
Agency ID: Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported

Action ID: 9498
Start Date: 1997-03-28 00:00:00
Region ID: Northwestern Region
Substance Code: SAS

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

BPA - ST. JOHNS SUBSTATION (Continued)

1006854090

Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments : Not reported
Cleanup Flag: False
Update Date: 1997-03-28 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 711826
Agency ID : Dept Of Environmental Quality
Further Action: Medium
Complete Date: 258
Rank Value: 0
Updated By: dmc
Created By: Not reported
Employee Id: 767
Comments : VOCs (groundwater) and remaining PCB levels (soil).
Action ID: 9502
Start Date: 1997-03-28 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-10-06 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712063
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 767
Comments : Not reported
Action ID: 9465
Start Date: 1997-04-28 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-03-26 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712287
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 730
Comments : Telephone call from Mr. Mark Hermiston requesting 45 day extension for comment
Action ID: 9428
Start Date: 1997-06-16 00:00:00
Region ID: Headquarters
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-08-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712591
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 313
Comments : Not reported
Action ID: 9424
Start Date: 1996-04-25 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1997-12-10 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 712600
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: gmw
Created By: Not reported
Employee Id: 767
Comments : State screening.
Action ID: 9425
Start Date: 1996-04-26 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1997-03-28 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709429
Action ID: 9488

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site	Database(s)	EDR ID Number	EPA ID Number
BPA - ST. JOHNS SUBSTATION (Continued)		1006854090	
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-12-08 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1998-03-26 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		
DISPOSAL:			
Disposal ID:	Not reported	Feature ID:	Not reported
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		
FEATURE:			
Feature Id :	Not reported		
Site Id :	Not reported		
Feature Code :	Not reported		
Relative Position :	Not reported		
Hazard Rel Id :	Not reported		
Region Code :	Not reported		
Lat Long Method :	Not reported		
Lat Long Source :	Not reported		
County Code :	Not reported		
Refrence Id :	Not reported		
Twnsbp Coord :	Not reported		
Township Zone :	Not reported		
Range Coord :	Not reported		
Range Zone :	Not reported		
Section Coord :	Not reported		
Qtr Section Coord :	Not reported		
Address :	Not reported		
	Not reported		
Zip Plus :	Not reported		
Lat/Long :	Not reported		
Lat/Lon Decimal :	Not reported		
Feature Size :	Not reported		
Est Accuracy :	Not reported		
Created On Date :	Not reported		
Created By Prgm :	Not reported		
Last Updated By :	Not reported		
Last Updated On :	Not reported		
Comment :	Not reported		
WELL:			
Well ID:	Not reported		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BPA - ST. JOHNS SUBSTATION (Continued)

1006854090

Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133158
Operation Status :Active
Common Name : St. Johns Substation
Yrs of Operation : at least 1940 to present
Comments : at least 1940 to present
Updated By : gmw
Updated Date : 1996-04-26 00:00:00

Process Code ID: Not reported
Years Of Process:Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id:Not reported
SIC Code: Not reported
Created By: Not reported
Created Date: Not reported

**H34
NE
1/2-1
4927 ft.**

**BPA - ST. JOHNS SUBSTATION
12567 N COLUMBIA BLVD
PORTLAND, OR 97203**

**HSIS S103303204
OR CRL N/A**

Site 2 of 2 in cluster H

**Relative:
Higher**

OR CRL:

**Actual:
47 ft.**

Facility ID: 1858
Location ID: 40402
Status Code: LIS
Facility Status: Remedial Investigation recommended (RI)
Lat/Long: 45.6138 / -122.7638

HSIS:

Emergency Contact:
Emergency Procedure: CONTROL HOUSE
Chemical Trade Name:
Most Hazardous:
Manager Name:
Mailing Address:

BPA MUNROE DISPATCHER

**LEAD ACID BATTERIES-WET
SULFURIC ACID
JOHN H BAKER
PO BOX 491
VANCOUVER, WA 98666**

Day Phone:
Employee File #:
No. of Employees:
Placard:
Business Type:
Sprinkler System:
Date Form Completed:
Business Phone:
Department Or Division Of Company:
Facility Has Written Emergency Plan:
Company Name:
Fire Dept Code:
Physical State :
Physical State Of The Substance:
Average Amount Possessed During The Year Code:
Description Of The Avg Qnty Code:

**8888359590
024648
0
No
ELECTRICAL SUBSTATION
No
Not reported
5032863234
ST JOHNS SUBSTATION
Yes
BPA
0291
Not reported
SOLID
21
5,000-9,999**

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BPA - ST. JOHNS SUBSTATION (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103303204

Maximum Amount Possessed During The Year Code: 21
Description Of The Max Qnty Code: 5,000-9,999
Applicable Unit Of Measure Code: 1
Description Of The Unit Of Measure: POUNDS
Storage Container:
Type Code: R
Description: OTHER
Pressure of Hazardous Substance Code: 1
Temperature of The Hazardous Substance Code: 4
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 2800
Chemical Abstract Service Identifier Number: 7664939
First Hazardous Classification Code For Chemical: 8.0
Hazard Classification 1 Of The Chemical: Corrosives
Second Hazardous Classification Code For Chemical: 6.3
Hazard Classification 2 Of The Chemical: Acute Health Hazard
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Mixture
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): Yes
Does The Chemical Contain A 112r Chemical: No
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Sic Code: 9211 - OTHER GENERAL GOV SUPPORT
2211 - ELECTRIC BULK POWER TRANSMISSION &

Emergency Contact: BPA MUNROE DISPATCHER
Emergency Procedure: CONTROL HOUSE
Chemical Trade Name: NITROGEN
Most Hazardous: NITROGEN
Manager Name: JOHN H BAKER
Mailing Address: PO BOX 491
VANCOUVER, WA 98666
8888359590
Day Phone: 024648
Employee File #: 0
No. of Employees: No
Placard: ELECTRICAL SUBSTATION
Business Type: No
Sprinkler System: Not reported
Date Form Completed: 5032863234
Business Phone: ST JOHNS SUBSTATION
Department Or Division Of Company: Yes
Facility Has Written Emergency Plan: BPA
Company Name: 0291
Fire Dept Code: Not reported
Physical State : GAS
Physical State Of The Substance: 20
Average Amount Possessed During The Year Code: 1,000-4,999
Description Of The Avg Qnty Code: 30
Maximum Amount Possessed During The Year Code: 10,000-49,999
Description Of The Max Qnty Code: 3
Applicable Unit Of Measure Code: CUBIC FEET
Description Of The Unit Of Measure:
Storage Container:
Type Code: L

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BPA - ST. JOHNS SUBSTATION (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103303204

Description: CYLINDER
Pressure of Hazardous Substance Code: 2
Temperature of The Hazardous Substance Code: 4
Days The Hazardous Substance Is On Site During Year: 365
Is The Substance Protected A Trade Secret: False
United Nations/north America 4 Digit Classification Number: 1066
Chemical Abstract Service Identifier Number: 7727379
First Hazardous Classification Code For Chemical: 2.2
Hazard Classification 1 Of The Chemical: NonFlammable Gases
Second Hazardous Classification Code For Chemical: Not reported
Hazard Classification 2 Of The Chemical: Not reported
Third Hazardous Classification Code For Chemical: Not reported
Hazard Classification 3 Of The Chemical: Not reported
Is Substance Pure Or Mixture: Pure
Hazard Rank: 2
Chemical Is An Extremely Hazardous Substance (ehs): Yes
Does The Chemical Contain A 112r Chemical: No
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Sic Code: 9211 - OTHER GENERAL GOV SUPPORT
2211 - ELECTRIC BULK POWER TRANSMISSION &

I35
ENE
1/2-1
5166 ft.

MT. HOOD METALS INC.
9645 N COLUMBIA BLVD
PORTLAND, OR 97203

SHWS - ECSI S103842943
OR VCS N/A

Site 1 of 2 In cluster I

Relative:
Higher

Actual:
49 ft.

ECSI:

State ID Number: 2058
Study Area: False
Cercdis ID: Not reported
Size: 5.0 acres
Orphan: False
Lat/Long: 45.6072 / -122.757
Township Coord.: 2.00
Range Coord.: 1.00
Section Coord.: 36
Legislative : 36
FACA ID : 14960
Update Date : 2004-01-14 14:40:10.
Created Time : 1997-06-10 00:00:00

Brown ID 0
Coordinator Supplier: GWISTAR
Tax Lots: TL 24 of TL A&B Ramsey Villa
NPL: False
Region ID: 2
Tax Lots: TL 24 of TL A&B Ramsey Villa
Township Zone: N
Range Zone: W
Qtr Section: CA
Further Action: 0
Score Value: 0
Created Date: kpd

HAZ RELEASED:

Quant. Released: Unknown
Date: 2/25/94, 6/15/94, 3/11/97, and other unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121671
Code : 7440-47-3
Substance Name : CHROMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8462
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318145
Sub Alias Name : CHROMIUM, INORGANIC

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Substance Alias ID : 319294
Sub Alias Name : CHROMIUM, TOTAL
Sampling Result ID : 341270
Feature Id : Not reported
Hazard Release Id : 378776
Medium Code Id : 700
Substance Id : Not reported
Unit Code : 63
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface runoff;
Start Date : 1994-02-25 00:00:00
End Date : Not reported
Minimum Concentration : 37.00
Max Concentration : 242.00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total chromium in surface runoff
Sampling Result ID : 341285
Feature Id : Not reported
Hazard Release Id : 378776
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : groundwater at 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .48
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total chromium in very shallow groundwater. Dissolved chromium at <0.005 mg/l.

Quant. Released: Unknown

Date: 2/25/94 and other unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported

Substance ID : 121664
Code : 7440-38-2
Substance Name : ARSENIC
Substance Abbrev. : Not reported
Substance Categ ID : 8439
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319286
Sub Alias Name : AS
Sampling Result ID : 341267
Feature Id : Not reported
Hazard Release Id : 381196
Medium Code Id : 700
Substance Id : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MT. HOOD METALS INC. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103842943

Unit Code : 63
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface runoff;
Start Date : 1994-02-25 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 6.00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total arsenic in treated surface runoff
Sampling Result ID : 341282
Feature Id : Not reported
Hazard Release Id : 381196
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : groundwater at 4.5- to 17 feet bgs;
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .03
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total arsenic in very shallow groundwater. Dissolved arsenic at <0.005 mg/l.
Quant. Released: Unknown
Date: 2/25/94; 6/15/94; and other unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121665
Code : 7440-39-3
Substance Name : BARIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8458
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319287
Sub Alias Name : BA
Sampling Result ID : 341268
Feature Id : Not reported
Hazard Release Id : 381197
Medium Code Id : 700
Substance Id : Not reported
Unit Code : 63
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface runoff;
Start Date : 1994-02-25 00:00:00
End Date : Not reported
Minimum Concentration : 97.00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

MT. HOOD METALS INC. (Continued)

S103842943

Max Concentration : 449.00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total barium in treated surface runoff.
Sampling Result ID : 341283
Feature Id : Not reported
Hazard Release Id : 381197
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : groundwater at 4.5- to 17 feet bgs;
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 5.21
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total barium in very shallow groundwater. Dissolved barium at 0.087 mg/l.
Quant. Released: Unknown
Date: 2/25/94, 6/15/94, and other unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121668
Code : 7440-43-9
Substance Name : CADMIUM
Substance Abbrev. : Not reported
Substance Categ ID : 8460
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319291
Sub Alias Name : CD
Sampling Result ID : 341269
Feature Id : Not reported
Hazard Release Id : 381198
Medium Code Id : 700
Substance Id : Not reported
Unit Code : 63
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface runoff;
Start Date : 1994-02-25 00:00:00
End Date : Not reported
Minimum Concentration : 8.00
Max Concentration : 38.00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total cadmium in surface runoff
Sampling Result ID : 341284
Feature Id : Not reported
Hazard Release Id : 381198
Medium Code Id : 698

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : groundwater at 4.5- to 17 feet bgs;
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .04
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total cadmium in very shallow groundwater. Dissolved cadmium at <0.003 mg/
l.

Quant. Released: Unknown

Date: 2/25/94, 6/15/94, 3/11/97, and other unknown

Update Date: 1997-05-09 00:00:00

Update By: Not reported

Substance ID : 121639

Code : 7439-92-1

Substance Name : LEAD

Substance Abbrev. : Not reported

Substance Categ ID : 8466

Substance Sub Categ : Inorganics

Category Level : Not reported

Created By : Not reported

Create Date : 2002-12-17 08:50:34.

Substance Alias ID : 319256

Sub Alias Name : PB

Sampling Result ID : 341271

Feature Id : Not reported

Hazard Release Id : 381199

Medium Code Id : 700

Substance Id : Not reported

Unit Code : 63

Observation : False

Owner Operator : False

Lab Data : True

Sample Depth : Surface runoff;

Start Date : 1994-02-25 00:00:00

End Date : Not reported

Minimum Concentration : 352.00

Max Concentration : 1580.00

Last Update By : sxf

Last Updated On : 1997-09-05 00:00:00

Sample Comment : As total lead in surface runoff

Sampling Result ID : 341286

Feature Id : Not reported

Hazard Release Id : 381199

Medium Code Id : 698

Substance Id : Not reported

Unit Code : 109

Observation : False

Owner Operator : False

Lab Data : True

Sample Depth : groundwater at 4.5- to 17 feet bgs

Start Date : 1993-04-28 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

End Date : Not reported
Minimum Concentration : .00
Max Concentration : 8.36
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total lead in very shallow groundwater. Dissolved lead at 0.003 mg/l.
Quant. Released: Unknown
Date: 2/25/94, 6/15/94, 3/11/97, and other unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121643
Code : 7439-97-6
Substance Name : MERCURY
Substance Abbrev. : Not reported
Substance Categ ID : 8467
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319260
Sub Alias Name : HG
Substance Alias ID : 319261
Sub Alias Name : HYDRARGYRUM
Substance Alias ID : 319262
Sub Alias Name : LIQUID SILVER
Substance Alias ID : 319263
Sub Alias Name : QUICKSILVER
Sampling Result ID : 341272
Feature Id : Not reported
Hazard Release Id : 381200
Medium Code Id : 700
Substance Id : Not reported
Unit Code : 63
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface runoff;
Start Date : 1994-02-25 00:00:00
End Date : Not reported
Minimum Concentration : .80
Max Concentration : 8.10
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total mercury in surface runoff
Sampling Result ID : 341287
Feature Id : Not reported
Hazard Release Id : 381200
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : groundwater at 4.5- to 17 feet bgs;
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MT. HOOD METALS INC. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103842943

Max Concentration : .01
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total mercury in very shallow groundwater. Dissolved mercury <0.0005 mg/l.
Quant. Released: Unknown
Date: 3/11/97
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121673
Code : 7440-50-8
Substance Name : COPPER
Substance Abbrev. : Not reported
Substance Categ ID : 8464
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319296
Sub Alias Name : CU
Sampling Result ID : 341273
Feature Id : Not reported
Hazard Release Id : 381201
Medium Code Id : 700
Substance Id : Not reported
Unit Code : 63
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface runoff
Start Date : 1997-03-11 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 570.00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total copper in surface runoff
Quant. Released: Unknown
Date: 3/11/97, and other unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121679
Code : 7440-66-6
Substance Name : ZINC
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319302
Sub Alias Name : ZN
Sampling Result ID : 341274
Feature Id : Not reported
Hazard Release Id : 381202
Medium Code Id : 700
Substance Id : Not reported
Unit Code : 63

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : Surface runoff;
Start Date : 1997-03-11 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 755.00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total zinc in surface runoff
Sampling Result ID : 341288
Feature Id : Not reported
Hazard Release Id : 381202
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : groundwater at 4.5- to 17 feet bgs;
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : 12.10
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total zinc in very shallow groundwater. Dissolved zinc at 0.013 mg/l.
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121587
Code : 67-64-1
Substance Name : ACETONE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 319114
Sub Alias Name : DIMETHYL KETONE
Substance Alias ID : 319115
Sub Alias Name : KETOPROPANE,beta-
Substance Alias ID : 319116
Sub Alias Name : PROPANONE,2-
Substance Alias ID : 319117
Sub Alias Name : PYROACETIC ETHER
Sampling Result ID : 341275
Feature Id : Not reported
Hazard Release Id : 381203
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Lab Data : True
Sample Depth : 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : In very shallow groundwater
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121051
Code : 1330-20-7
Substance Name : XYLENEs
Substance Abbrev. : Not reported
Substance Categ ID : 8526
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 317017
Sub Alias Name : DIMETHYLBENZENEs
Substance Alias ID : 317018
Sub Alias Name : XYLOLs
Sampling Result ID : 341276
Feature Id : Not reported
Hazard Release Id : 381204
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : In very shallow groundwater
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121777
Code : 78-93-3
Substance Name : METHYL ETHYL KETONE
Substance Abbrev. : Not reported
Substance Categ ID : Not reported
Substance Sub Categ : Not reported
Category Level : Not reported
Created By : Not reported
Create Date : Not reported
Substance Alias ID : 317507

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Sub Alias Name : BUTANONE,2-
Substance Alias ID : 317508
Sub Alias Name : ETHYL METHYL KETONE
Substance Alias ID : 317509
Sub Alias Name : MEK
Substance Alias ID : 317510
Sub Alias Name : METHYL ACETONE
Sampling Result ID : 341277
Feature Id : Not reported
Hazard Release Id : 381205
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : In very shallow groundwater
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121711
Code : 75-69-4
Substance Name : TRICHLOROMONOFUOROMETHANE
Substance Abbrev. : Not reported
Substance Categ ID : 8524
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319386
Sub Alias Name : FLUOROTRICHLOROMETHANE
Substance Alias ID : 319387
Sub Alias Name : FREON 11
Substance Alias ID : 319388
Sub Alias Name : METHANE,TRICHLOROFLUORO-
Substance Alias ID : 319389
Sub Alias Name : TRICHLOROFLUOROMETHANE
Sampling Result ID : 341278
Feature Id : Not reported
Hazard Release Id : 381206
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Minimum Concentration : .00
Max Concentration : .01
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : In very shallow groundwater
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121011
Code : 127-18-4
Substance Name : TETRACHLOROETHYLENE
Substance Abbrev. : Not reported
Substance Categ ID : 8519
Substance Sub Categ : Volatiles
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Categ ID : 8551
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 316912
Sub Alias Name : ETHENE,TETRACHLORO-
Substance Alias ID : 316913
Sub Alias Name : ETHYLENE TETRACHLORIDE
Substance Alias ID : 316914
Sub Alias Name : PERCHLOROETHYLENE
Substance Alias ID : 316915
Sub Alias Name : PERCLEN
Substance Alias ID : 316916
Sub Alias Name : TETRACHLOROETHENE
Substance Alias ID : 316917
Sub Alias Name : TETRACHLOROETHENE,1,1,2,2-
Substance Alias ID : 316918
Sub Alias Name : TETRACHLOROETHYLENE,1,1,2,2-
Sampling Result ID : 341279
Feature Id : Not reported
Hazard Release Id : 381207
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .00
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : In very shallow groundwater
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Update By: Not reported
Substance ID : 121472
Code : 57-12-5
Substance Name : CYANIDE (AS ION)
Substance Abbrev. : Not reported
Substance Categ ID : 8465
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 318818
Sub Alias Name : CN (AS ION)
Sampling Result ID : 341280
Feature Id : Not reported
Hazard Release Id : 381208
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00
Max Concentration : .05
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : In very shallow groundwater
Quant. Released: Unknown
Date: Unknown
Update Date: 1997-05-09 00:00:00
Update By: Not reported
Substance ID : 121642
Code : 7439-96-5
Substance Name : MANGANESE
Substance Abbrev. : Not reported
Substance Categ ID : 8468
Substance Sub Categ : Inorganics
Category Level : Not reported
Created By : Not reported
Create Date : 2002-12-17 08:50:34.
Substance Alias ID : 319259
Sub Alias Name : MN
Sampling Result ID : 341281
Feature Id : Not reported
Hazard Release Id : 381209
Medium Code Id : 698
Substance Id : Not reported
Unit Code : 109
Observation : False
Owner Operator : False
Lab Data : True
Sample Depth : 4.5- to 17 feet bgs
Start Date : 1993-04-28 00:00:00
End Date : Not reported
Minimum Concentration : .00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Max Concentration : 54.60
Last Update By : sxf
Last Updated On : 1997-09-05 00:00:00
Sample Comment : As total manganese in very shallow groundwater. Dissolved manganese of 0.871 mg/l.

Alias Name: Union Carbide Sludge Disposal Pond
Investigation Status: 207

NARR:

NARR ID: 5736935
NARR Code : Site Contacts
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

NARR Comments Bert Bors, President of Mt.Hood Metals, 9645 N Columbia Blvd, PO Box 83123, Portland, OR 97283-0123, (503) 283-3300.
Surface runoff and shallow groundwater analyses indicate shallow soils are contaminated with cyanide, barium, cadmium, chromium, lead, mercury, zinc, copper, petroleum, Total Organic Halides, and chlorinated solvents (Freon 113 and perchloroethylene), which may be attributable to site activities by Mt.Hood Metals, Inc. Contaminants detected in the site's deeper soils and groundwater (cyanide, antimony, arsenic, barium, cadmium, chromium, lead, mercury, selenium, copper, zinc, thallium, methylene chloride, phenols, PAHs, and pesticides) may largely be attributable to historic sludge disposal activities of Union Carbide Corporation, although some commingling of contaminants from the two operations cannot be ruled out. See also ECSI #176 (Union Carbide).
Facility constructed over former Union Carbide sludge disposal pond (active from early 1970s to early 1980s - see ECSI #176). Union Carbide disposed of wet scrubber sludges containing metals, cyanide, and PAHs, from its air-pollution-control systems, to a sludge pond located beneath the current Mt. Hood Metals operation. Mt. Hood Metals has discharged surface runoff contaminated with metals, petroleum, and other toxics to the Columbia Slough.
DEQ Water Quality Permit File data for Mt.Hood Metals; Preliminary Hydrogeologic Assessment - Mt.Hood Metals Property, by EMCON Northwest, 11/93; Columbia Slough sediment data - City of Portland (1994); Water Quality files for Union Carbide, Elkem Metals, and Oregon Steel Mills; Union Carbide ECSI File (ECSI #176).
A scrap metals salvager/recycler located between N Columbia Boulevard and UPRR railroad tracks and Columbia Slough. A concrete pad was constructed over the entire site between 11/96 and 3/97. The facility was constructed over the southern-most of two former Union Carbide sludge-disposal ponds. The southern pond was evidently backfilled with gravel and silty gravel shortly before Mt. Hood Metals moved in. Site runoff is treated (oil separator/skimmer and sedimentation) then discharged to Columbia Slough via the former south sludge disposal pond's overflow discharge pipe. Toxic metals (As, Ba, Cd, Cr, Pb, Hg), other metals (Cu, Zn) that may have adverse effects in aquatic environments, petroleum (O&G, xylenes), chlorinated solvents (Freon 113, PCE), possible cyanide. Analyses of stormwater runoff suggest the site may have substantial soil contamination. Contaminants may be largely associated with particulate matter. SEE ALSO: UNION CARBIDE SITE (ECSI #176).

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Analyses of stormwater runoff discharged to the slough and groundwater from shallow site monitoring well MW-3 suggest that surface and shallow subsurface soils were contaminated with toxic metals, petroleum, and chlorinated solvents after the former Union Carbide sludge disposal pond (beneath the site) was backfilled. Stormwater runoff has been discharged to the slough, and analyses indicate significantly elevated concentrations of similar contaminants in slough sediments. The site was recently covered with a concrete pad, but very shallow groundwater (3-5 feet bgs) has been detected at the site. Although no significant rainwater infiltration is expected at the site, the shallow (perched ?) groundwater, as well as deeper groundwater, could still mobilize existing subsurface contaminants. The site is located along Columbia Slough, an ecologically sensitive surface water body, and there are residential properties along its southern property line. The relative contributions to deeper groundwater contamination, and Columbia Slough sediment contamination, from Mt. Hood Metals operations and Union Carbide sludge ponds cannot be apportioned at this time.

Industrial/commercial. Residential properties adjoin the site at its southern boundary. The site lies within 70 feet of the Columbia Slough. The site lies between N Columbia Boulevard and the Columbia Slough. A UPRR right-of-way lies between the site and Columbia Slough. The area is generally industrialized, although two residential properties are located along the site's southern boundary.

Contaminated stormwater runoff has been discharged to Columbia Slough. Contaminants may be largely associated with particulate matter, indicating that site soils may have been heavily contaminated. Surface contamination may be associated with routine metals handling practices at the site. Shallow groundwater contamination may be associated with surface soils contamination rather than deeper sludge sediments buried at the site.

Slough sediments, and presumably slough surface waters; stormwater runoff, and presumably site surface soils; very shallow groundwater (3 feet bgs) and deeper groundwater (15- to 20 feet bgs); buried sludge sediments from former Union Carbide sludge disposal practices.

Currently owned by Bert Bors (Mt.Hood Metals' president) and George Bors. Site was previously owned by Union Carbide (ECSI #176) when it was actively used as a sludge disposal pond.

It is unclear if adjoining residential properties have domestic wells (several shallow wells were installed in the area - well locations not clearly defined - at about the time that residential properties were first developed); possible human consumption of contaminated groundwater, or direct contact with groundwater used for lawn or garden irrigation. Potential toxicity to aquatic life in Columbia Slough. Potential direct contact with contaminated surface soils outside site's northeastern fence line. Potential historic discharge of contaminated runoff onto adjoining residential properties (human direct contact with residues) to the southeast. Potential human consumption of contaminated fish tissue from Columbia Slough. Potential human contact with contaminated surface waters within Columbia Slough.

A concrete pad constructed over the entire site between 11/96 and 3/97 should limit additional surface infiltration of rainwater. Further investigation of the full horizontal and vertical extent of site contamination should be conducted,

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

MT. HOOD METALS INC. (Continued)

S103842943

then a form
al Risk Assessment should be conducted to determine if site contaminants represent a significant threat to nearby residents, aquatic life within the slough, or persons consuming fish caught from the slough. Further state action is a medium-to-high priority. (7/19/99 MJM/VCP) DEQ entered into a Voluntary Letter Agreement with Mt. Hood Metals on 4/22/98 to provide oversight of remedial investigation activities. (9/27/00 MJM/VCP) Union Carbide has signed a Consent Order with DEQ to perform a remedial investigation of its former facility operations which include a sludge pond on the Mt. Hood Metals property. (1/19/01 MJM/VCP) Remedial Investigation (RI) of the site by both Mt. Hood Metals and Union Carbide is ongoing. Toxic metals, petroleum, chlorinated solvents, possible cyanide. Potential direct contact with likely contaminated soils along site's eastern fence line. Potential direct contact with soils that may have been contaminated at residential properties along southern site boundary. Possible human consumption of contact with contaminated shallow groundwater (door-to-door water use survey necessary). Possible direct-contact threat to any future underground utility workers. Potential threat to individuals consuming fish tissue from Columbia Slough. Potential on-site worker exposure to contaminated particulate matter (dust inhalation; direct contact; ingestion). Site has been completely covered with a concrete pad, but very shallow groundwater (3- to 5 feet bgs) may continue to mobilize subsurface contaminants. Former Union Carbide sludge disposal ponds were unlined - groundwater may periodically saturate deeper sludge sediments. Contaminated surface runoff is directly discharged to Columbia Slough. Unclear if shallow groundwater is used in immediate vicinity of site. Contaminated groundwater may discharge to Columbia Slough. Surface runoff is discharged to slough. Both threaten aquatic life and individuals that consume fish caught from slough.

NARR ID: 5736936
NARR Code : Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736937
NARR Code : Disposals
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736938
NARR Code : Data Sources
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736939
NARR Code : General Site Description
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MT. HOOD METALS INC. (Continued)

Database(s) EDR ID Number
EPA ID Number

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NARR ID: 5736940
NARR Code : Hazardous Substance/Waste Types
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736941
NARR Code : Project Issues Summary
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736942
NARR Code : Land Use (Current/Reasonably Likely)
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736943
NARR Code : Site Location
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736944
NARR Code : Manner of Release
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736945
NARR Code : Media Contamination
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736946
NARR Code : Site Ownership
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736947
NARR Code : Pathways Other Hazards
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736948
NARR Code : Remedial Action
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736949
NARR Code : Substances of Concern
Created By: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736950
NARR Code : Health Threats
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736951
NARR Code : Containment Units
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04
NARR ID: 5736952
NARR Code : Water Use (Current/Reasonably Likely)
Created By: Not reported
Create Date: 2002-12-17 08:50:04
Updated By: Not reported
Updated Date: 2002-12-17 08:50:04

ECWQ:

Owner Site Num: 133325
Site Name: Mt. Hood Metals Inc.
County Code : 26.00
Owner Name: Mt.Hood Metals
Owner Address: 9645 N Columbia BLVD
Portland, 97203
Lat/Long 45.6072 / -122.7576
Owner Code: LIS

FACA Id : 14960

PERMIT:

Permit Number: Not reported
Permit Agency: Not reported
Permit Comments: Not reported

Permit Type: Not reported

ADMIN ACT:

Admin ID: 709507
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kpd
Created By: Not reported
Employee Id: 541
Comments : Not reported

Action ID: 9442
Start Date: 1998-03-18 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1998-05-07 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709587
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: jmw
Created By: Not reported
Employee Id: 541
Comments : Not reported

Action ID: 9456
Start Date: 1998-04-07 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1998-11-06 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709712

Action ID: 9440

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

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Agency ID :	Dept Of Environmental Quality	Start Date:	1998-04-22 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2001-06-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	541		
Comments :	Not reported		

Admin ID:	710215	Action ID:	9438
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-08-20 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1998-08-20 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		

Admin ID:	710216	Action ID:	9439
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-08-20 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	1998-08-20 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		

Admin ID:	710334	Action ID:	9503
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-22 00:00:00
Further Action:	High-Medium	Region ID:	Northwestern Region
Complete Date:	257	Substance Code:	SAS
Rank Value:	89	Cleanup Flag:	False
Updated By:	sxf	Update Date:	1997-11-12 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Co-evaluation of Union Carbide sludge disposal ponds (ECSI #176) recommended.		

Admin ID:	710335	Action ID:	9498
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-22 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-10-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	710336	Action ID:	9499
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-22 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-10-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

MT. HOOD METALS INC. (Continued)

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Comments : Not reported

Admin ID:	710514	Action ID:	9425
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-01 00:00:00
Further Action:	High-Medium	Region ID:	Northwestern Region
Complete Date:	257	Substance Code:	SAS
Rank Value:	89	Cleanup Flag:	False
Updated By:	sxf	Update Date:	1997-11-12 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Federal Screening of Columbia Slough sites; State PAE. Simultaneous evaluation of Union Carbide sludge disposal ponds (ECSI #176)		

Admin ID:	710515	Action ID:	9437
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-21 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-10-15 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	710882	Action ID:	9459
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-08-01 00:00:00
Further Action:	High-Medium	Region ID:	Northwestern Region
Complete Date:	257	Substance Code:	SAS
Rank Value:	89	Cleanup Flag:	False
Updated By:	sxf	Update Date:	1997-11-12 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	349		
Comments :	Not reported		

Admin ID:	707411	Action ID:	9484
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-10-29 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	VCS
Rank Value:	0	Cleanup Flag:	False
Updated By:	gmw	Update Date:	1999-10-06 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	518		
Comments :	Not reported		

Admin ID:	712186	Action ID:	9424
Agency ID :	Dept Of Environmental Quality	Start Date:	1997-06-10 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	Not reported	Substance Code:	SRS
Rank Value:	0	Cleanup Flag:	False
Updated By:	jmw	Update Date:	2001-06-14 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	301		
Comments :	Not reported		

Admin ID:	709132	Action ID:	9467
Agency ID :	Dept Of Environmental Quality	Start Date:	1998-01-20 00:00:00
Further Action:	Not reported	Region ID:	Northwestern Region
Complete Date:	Not reported	Substance Code:	SAS

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MT. HOOD METALS INC. (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103842943

Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Cleanup Flag: False
Update Date: 1998-01-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709133
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Not reported

Action ID: 9465
Start Date: 1998-01-20 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-01-27 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709306
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 10
Updated By: jmd
Created By: Not reported
Employee Id: 313
Comments : High priority site.

Action ID: 9519
Start Date: 1998-03-05 00:00:00
Region ID: Northwestern Region
Substance Code: VCS
Cleanup Flag: False
Update Date: 1998-04-02 00:00:00
Create Date: 2002-12-17 08:50:22.

Admin ID: 709428
Agency ID : Dept Of Environmental Quality
Further Action: Not reported
Complete Date: Not reported
Rank Value: 0
Updated By: kvp
Created By: Not reported
Employee Id: 730
Comments : Comments received from Roger Florio.

Action ID: 9451
Start Date: 1998-03-12 00:00:00
Region ID: Northwestern Region
Substance Code: SAS
Cleanup Flag: False
Update Date: 1998-03-25 00:00:00
Create Date: 2002-12-17 08:50:22.

DISPOSAL:

Disposal ID: Not reported
Medium : Not reported
Treatment : Not reported
Disposal Method: Not reported
Start Date: Not reported
Disposal Flag: Not reported
Unit Code: Not reported
Depth : Not reported
Monitor : Not reported
Manifest Num : Not reported
Removed By : Not reported
Loc Comments: Not reported
Disposal Sub ID: Not reported
Substance ID: Not reported
Created By: Not reported
Create Date: Not reported

Feature ID: Not reported

End Date: Not reported
Disposal Qty: Not reported

FEATURE:

Feature Id : Not reported
Site Id : Not reported
Feature Code : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MT. HOOD METALS INC. (Continued)

S103842943

Relative Position : Not reported
Hazard Rel Id : Not reported
Region Code : Not reported
Lat Long Method : Not reported
Lat Long Source : Not reported
County Code : Not reported
Reference Id : Not reported
Twnshp Coord : Not reported
Township Zone : Not reported
Range Coord : Not reported
Range Zone : Not reported
Section Coord : Not reported
Qtr Section Coord : Not reported
Address : Not reported
 Not reported
Zip Plus : Not reported
Lat/Long : Not reported
Lat/Lon Decimal : Not reported
Feature Size : Not reported
Est Accuracy : Not reported
Created On Date : Not reported
Created By Prgm : Not reported
Last Updated By : Not reported
Last Updated On : Not reported
Comment : Not reported

WELL:

Well ID: Not reported
Water Resource Code: Not reported
Effective Date: Not reported
Aquifer Code: Not reported
Ground Station Key: Not reported

OPERATIONS:

Operation Id : 133325
Operation Status : Active
Common Name : Mt.Hood Metals
Yrs of Operation : 1988 -
Comments : 1988 -
Updated By : jmw
Updated Date : 2001-05-31 00:00:00

Process Code ID: Not reported
Years Of Process: Not reported
Created By: Not reported
Created Date: Not reported

Operations SIC Id: 196530
SIC Code: 5093
Created By: Not reported
Created Date: 2002-12-17 08:50:34.

OR VCS:

ECS Site ID: 2058
Action: RI
Start Date: 10/29/19
End Date: Not reported
Program: VCS
CRL: LIS
Facility Size: 5.0 acres

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MT. HOOD METALS INC. (Continued)

Project Manager Last Name: McClincy
Project Manager First Name: Matt

Database(s)
EDR ID Number
EPA ID Number

S103842943

I36
ENE
1/2-1
5166 ft.

MT. HOOD METALS INC.
9645 N COLUMBIA BLVD
PORTLAND, OR 97203

OR CRL S103054443
N/A

Site 2 of 2 in cluster I

Relative:
Higher

OR CRL:

Actual:
49 ft.

Facility ID: 2058
Location ID: 14960
Status Code: LIS
Facility Status: REMEDIAL INVESTIGATION
Lat/Long: 45.6072 / -122.7576

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BURLINGTON	1006857405	ST. HELENS RD - GASOLINE SPILL	HWY 30	97231	SHWS - ECSI, FINDS
PORTLAND	S106352696	PORT OF PORTLAND - TERMINAL EXPANS	7000 NE AIRPORT WAY - PORTLAND		OR VCS
PORTLAND	S106236446	WELCH PROPERTY - 9902-03 N. HURST	9902 AND 9903 N HURST AVE	97203	SHWS - ECSI
PORTLAND	S105980662	KFD LANDFILL	BETWEEN KILLINGSWORTH / COLUMB		SWF/LF
PORTLAND	S106236558	SCHNITZER STEEL INDUSTRIES - NORTH	12005 N BURGARD RD	97203	SHWS - ECSI
PORTLAND	S106194740	BERTHA TRIANGLE	CAPITOL HWY. BETWEEN BERTHA BL		Brownfields
PORTLAND	S106352681	BERTHA TRIANGLE	SW CAPITOL HWY BETWEEN BERTHA		OR VCS
PORTLAND	S102077975	CITY OF PORTLAND	5001 N COLUMBIA BLVD.	97203	SWF/LF, OR SPILLS
PORTLAND	S106236435	PETROLEUM RELEASE - N EDGEWATER ST	N EDGEWATER ST.	97203	SHWS - ECSI
PORTLAND	1006853789	WILLAMETTE COVE	FOOT OF N EDGEWATER ST	97203	SHWS - ECSI, FINDS, OR VCS
PORTLAND	1006853332	RK STORAGE AND WAREHOUSING	10225 NW FRONT AVE	97231	SHWS - ECSI, FINDS
PORTLAND	S106236559	PORT OF PORTLAND - TERMINAL 4 SLIP	N LOMBARD ST	97203	SHWS - ECSI
PORTLAND	S106236469	BLUE LAGOON - MARINE TERMINAL 5	N LOMBARD ST	97203	SHWS - ECSI
PORTLAND	S103842625	BLUE LAGOON - MARINE TERMINAL 5	N LOMBARD ST	97203	OR VCS
PORTLAND	1006852767	SOUTH RIVERGATE INDUSTRIAL PARK	NORTH LOMBARD AND RIVERGATE BL	97203	SHWS - ECSI, FINDS
PORTLAND	S106236425	LINNTON OIL FIRE TRAINING GROUNDS	NW MARINA WAY	97231	SHWS - ECSI
PORTLAND	S106236429	COLUMBIA SLOUGH	31.5 MILES OF WATERWAY OVER AN		SHWS - ECSI
PORTLAND	1004771999	CEREAL FOOD PROCESSORS INC	MUNICIPAL TERMINAL 4 FT N BURG	97203	RCRIS-SQG, FINDS
PORTLAND	1006853227	MULTNOMAH COUNTY - ST. JOHNS SITE	7321 N NEW YORK AVE (PARCEL 2)	97203	SHWS - ECSI, FINDS
PORTLAND	1006854530	MOCKS BOTTOM	NORTH OF SWAN ISLAND	97203	SHWS - ECSI, FINDS
PORTLAND	S106236452	V.A.- COLUMBIA SOUTH SHORE WELLFIE	NORTH OF COLUMBIA / SANDY BL		SHWS - ECSI
PORTLAND	1006851721	LARSEN NORTH - CITY OF PORTLAND	10505 N PORTLAND RD	97203	SHWS - ECSI, FINDS
PORTLAND	S106236411	ST. JOHNS - KEELER #2 RIGHT-OF-WAY	SOUTH RIVERGATE INDUSTRIAL ARE	97203	SHWS - ECSI
PORTLAND	S106236666	OLYMPIC PIPE LINE PORTLAND DELIVER	9420 NW ST HELENS RD	97231	SHWS - ECSI
PORTLAND	S106236413	KINDER MORGAN LIQUID TERMINALS - L	11400 NW ST. HELENS RD	97231	SHWS - ECSI
PORTLAND	S106044994	KINDER MORGAN LIQUID TERMINALS - L	11400 NW ST. HELENS RD	97231	OR VCS
PORTLAND	S106236561	TRANSLOADER INTERNATIONAL COMPANY	8444 NW ST. HELENS RD	97231	SHWS - ECSI
PORTLAND	1000265612	ST JOHNS JUNCTION P L DELIVERY FAC	UPRR TERMINAL RD TERM 4	97203	RCRIS-SQG, FINDS
PORTLAND	S106236345	TRIANGLE PARK - NORTH PORTLAND YAR	5828 N VAN HOUTEN PL	97203	SHWS - ECSI
PORTLAND	1006854011	ALDER CREEK LUMBER COMPANY INCORPO	14456 NORTH WEST GILLIHAN ROAD	97231	SHWS - ECSI, FINDS
PORTLAND	S106044943	NEW COLUMBIA HOPE VI	8910 N. WOOLSEY	97203	SHWS - ECSI, OR VCS

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D018	BENZENE
D035	METHYL ETHYL KETONE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA

Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/04

Date Made Active at EDR: 05/21/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/04

Elapsed ASTM days: 17

Date of Last EDR Contact: 05/04/04

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1

Telephone 617-918-1143

EPA Region 3

Telephone 215-814-5418

EPA Region 4

Telephone 404-562-8033

EPA Region 6

Telephone: 214-655-6659

EPA Region 8

Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites

Source: EPA

Telephone: N/A

Date of Government Version: 04/27/04

Date Made Active at EDR: 05/21/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/04

Elapsed ASTM days: 17

Date of Last EDR Contact: 05/04/04

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/26/04

Date Made Active at EDR: 04/02/04

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/22/04

Elapsed ASTM days: 11

Date of Last EDR Contact: 03/22/04

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/26/04
Date Made Active at EDR: 04/02/04
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/22/04
Elapsed ASTM days: 11
Date of Last EDR Contact: 03/22/04

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/04
Date Made Active at EDR: 04/15/04
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 03/25/04
Elapsed ASTM days: 21
Date of Last EDR Contact: 03/08/04

RCRIS: Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 04/13/04
Date Made Active at EDR: 05/13/04
Database Release Frequency: Varies

Date of Data Arrival at EDR: 04/20/04
Elapsed ASTM days: 23
Date of Last EDR Contact: 04/20/04

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/03
Date Made Active at EDR: 03/12/04
Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/26/04
Elapsed ASTM days: 46
Date of Last EDR Contact: 04/26/04

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/01
Database Release Frequency: Biennially

Date of Last EDR Contact: 03/16/04
Date of Next Scheduled EDR Contact: 06/14/04

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/08/04

Database Release Frequency: Annually

Date of Last EDR Contact: 04/05/04

Date of Next Scheduled EDR Contact: 07/05/04

DELISTED NPL: National Priority List Deletions

Source: EPA

Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/04/04

Date of Next Scheduled EDR Contact: 08/02/04

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA

Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/08/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/05/04

Date of Next Scheduled EDR Contact: 07/05/04

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/17/04

Database Release Frequency: Annually

Date of Last EDR Contact: 04/20/04

Date of Next Scheduled EDR Contact: 07/19/04

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/19/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/05/04

Date of Next Scheduled EDR Contact: 07/05/04

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 03/05/04

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/30/04

Date of Next Scheduled EDR Contact: 06/28/04

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 03/12/04
Date of Next Scheduled EDR Contact: 05/24/04

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/30/04
Database Release Frequency: Annually

Date of Last EDR Contact: 05/12/04
Date of Next Scheduled EDR Contact: 08/09/04

DOD: Department of Defense Sites

Source: USGS

Telephone: 703-692-8801

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 10/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/02/04
Date of Next Scheduled EDR Contact: 05/10/04

STORMWATER: Storm Water General Permits

Source: Environmental Protection Agency

Telephone: 202 564-0746

A listing of all facilities with Storm Water General Permits.

Date of Government Version: N/A
Database Release Frequency: Quarterly

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

INDIAN RESERV: Indian Reservations

Source: USGS

Telephone: 202-208-3710

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 10/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/02/04
Date of Next Scheduled EDR Contact: 05/10/04

US BROWNFIELDS: A Listing of Brownfields Sites

Source: Environmental Protection Agency

Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 04/14/04
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/15/04
Date of Next Scheduled EDR Contact: 06/14/04

RMP: Risk Management Plans

Source: Environmental Protection Agency

Telephone: 202-564-8600

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Database Release Frequency: N/A

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

FUDS: Formerly Used Defense Sites

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/01/03
Database Release Frequency: Varies

Date of Last EDR Contact: 04/26/04
Date of Next Scheduled EDR Contact: 07/05/04

RAATS: RCRA Administrative Action Tracking System

Source: EPA
Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 03/08/04
Date of Next Scheduled EDR Contact: 06/07/04

TRIS: Toxic Chemical Release Inventory System

Source: EPA
Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/01
Database Release Frequency: Annually

Date of Last EDR Contact: 03/23/04
Date of Next Scheduled EDR Contact: 06/21/04

TSCA: Toxic Substances Control Act

Source: EPA
Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/02
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 03/05/04
Date of Next Scheduled EDR Contact: 06/07/04

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA
Telephone: 202-564-2501

Date of Government Version: 04/13/04
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/22/04
Date of Next Scheduled EDR Contact: 06/21/04

SSTS: Section 7 Tracking Systems

Source: EPA
Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/01
Database Release Frequency: Annually

Date of Last EDR Contact: 04/19/04
Date of Next Scheduled EDR Contact: 07/19/04

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/13/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/22/04

Date of Next Scheduled EDR Contact: 06/21/04

STATE OF OREGON ASTM STANDARD RECORDS

SHWS - ECSI: Environmental Cleanup Site Information System

Source: Department of Environmental Quality

Telephone: 503-229-6629

Sites that are or may be contaminated and may require cleanup.

Date of Government Version: 03/30/04

Date Made Active at EDR: 05/07/04

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/31/04

Elapsed ASTM days: 37

Date of Last EDR Contact: 02/17/04

SWF/LF: Solid Waste Facilities List

Source: Department of Environmental Quality

Telephone: 503-229-6299

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/21/04

Date Made Active at EDR: 05/07/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 04/21/04

Elapsed ASTM days: 16

Date of Last EDR Contact: 03/22/04

LUST: Leaking Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5790

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/06/04

Date Made Active at EDR: 05/12/04

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 04/19/04

Elapsed ASTM days: 23

Date of Last EDR Contact: 01/16/04

UST: Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5815

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/07/04

Date Made Active at EDR: 05/12/04

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 04/19/04

Elapsed ASTM days: 23

Date of Last EDR Contact: 02/10/04

CRL: Confirmed Release List and Inventory

Source: Department of Environmental Quality

Telephone: 503-229-6170

All facilities with a confirmed release.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/16/04
Date Made Active at EDR: 04/13/04
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/17/04
Elapsed ASTM days: 27
Date of Last EDR Contact: 03/17/04

INDIAN UST: Underground Storage Tanks on Indian Land

Source: EPA Region 10
Telephone: 206-553-2857

Date of Government Version: 03/11/04
Date Made Active at EDR: 03/26/04
Database Release Frequency: Varies

Date of Data Arrival at EDR: 03/12/04
Elapsed ASTM days: 14
Date of Last EDR Contact: 02/23/04

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land

Source: EPA Region 10
Telephone: 206-553-2857
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/11/04
Date Made Active at EDR: 03/26/04
Database Release Frequency: Varies

Date of Data Arrival at EDR: 03/12/04
Elapsed ASTM days: 14
Date of Last EDR Contact: 01/27/04

VCS: Voluntary Cleanup Program Sites

Source: DEQ
Telephone: 503-229-5256

Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

Date of Government Version: 05/14/04
Date Made Active at EDR: 06/18/04
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/14/04
Elapsed ASTM days: 35
Date of Last EDR Contact: 05/03/04

STATE OF OREGON ASTM SUPPLEMENTAL RECORDS

SPILLS: Spill Data

Source: Department of Environmental Quality
Telephone: 503-229-5731

Date of Government Version: 03/02/04
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/01/04
Date of Next Scheduled EDR Contact: 05/31/04

AOC COL: Columbia Slough

Source: City of Portland Environmental Services
Telephone: 503-823-5310
Columbia Slough waterway boundaries.

Date of Government Version: N/A
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/26/02
Date of Next Scheduled EDR Contact: N/A

AST: Aboveground Storage Tanks

Source: Office of State Fire Marshal
Telephone: 503-378-3473

Aboveground storage tank locations reported to the Office of State Fire Marshal.

Date of Government Version: 03/01/04
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/01/04
Date of Next Scheduled EDR Contact: 05/31/04

AOC MU: East Multnomah County Area

Source: City of Portland Environmental Services
Telephone: 503-823-5310
Approximate extent of TSA VOC plume February , 2002

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/26/02
Date of Next Scheduled EDR Contact: N/A

CDL: Uninhabitable Drug Lab Properties

Source: Department of Consumer & Business Services
Telephone: 503-378-4133

The properties listed on these county pages have been declared by a law enforcement agency to be unfit for use due to meth lab and/or storage activities. The properties are considered uninhabitable until cleaned up by a state certified decontamination contractor and a certificate of fitness is issued by the Oregon Health Division.

Date of Government Version: 03/15/04
Database Release Frequency: Varies

Date of Last EDR Contact: 03/17/04
Date of Next Scheduled EDR Contact: 06/14/04

HIST LF: Old Closed SW Disposal Sites

Source: Department of Environmental Quality
Telephone: 503-229-5409

A list of solid waste disposal sites that have been closed for a long while.

Date of Government Version: 04/01/00
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 07/08/03
Date of Next Scheduled EDR Contact: N/A

HAZMAT: Hazmat/Incidents

Source: State Fire Marshal's Office
Telephone: 503-373-1540

Hazardous material incidents reported to the State Fire Marshal by emergency responders. The hazardous material may or may not have been released.

Date of Government Version: 03/03/04
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/23/04
Date of Next Scheduled EDR Contact: 05/24/04

HSIS: Hazardous Substance Information Survey

Source: State Fire Marshal's Office
Telephone: 503-373-1540

Companies in Oregon submitting the Hazardous Substance Information Survey and either reporting or not reporting hazardous substances.

Date of Government Version: 03/01/04
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/01/04
Date of Next Scheduled EDR Contact: 05/31/04

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

BROWNFIELDS DATABASES

Brownfields: Brownfields Projects

Source: Department of Environmental Quality

Telephone: 503-229-6801

Brownfields investigations and/or cleanups that have been conducted in Oregon.

Date of Government Version: 03/16/04

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/17/04

Date of Next Scheduled EDR Contact: 06/14/04

AUL: Sites with Engineering or Institutional Controls

Source: Department of Environmental Quality

Telephone: 503-229-6801

Activity and use limitations include both engineering controls and institutional controls.

Date of Government Version: 03/16/04

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/17/04

Date of Next Scheduled EDR Contact: 06/14/04

US BROWNFIELDS: A Listing of Brownfields Sites

Source: Environmental Protection Agency

Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: N/A

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

VCS: Voluntary Cleanup Program Sites

Source: DEQ

Telephone: 503-229-5256

Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

Date of Government Version: 11/04/02

Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/03/04

Date of Next Scheduled EDR Contact: 08/02/04

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation

Telephone: (800) 823-6277

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers for Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Listings

Source: Employment Department

Telephone: 503-947-1420

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KINDER MORGAN BULK TERMINAL LEASEHOLD
11040 N LOMBARD TERMINAL 4, P
PORTLAND, OR 97203

TARGET PROPERTY COORDINATES

Latitude (North):	45.601398 - 45° 36' 5.0"
Longitude (West):	122.774498 - 122° 46' 28.2"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	517586.5
UTM Y (Meters):	5049569.0
Elevation:	14 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

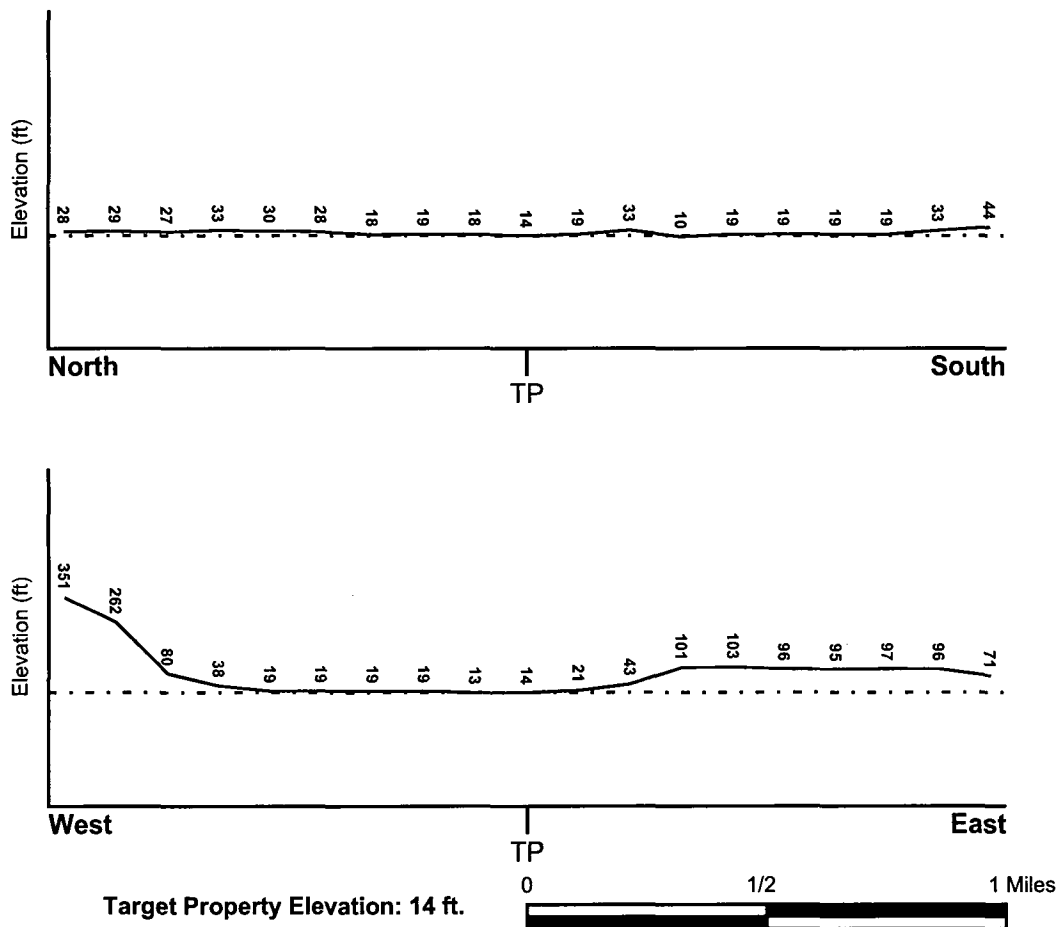
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 45122-E7 LINNTON, OR
General Topographic Gradient: General West
Source: USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
MULTNOMAH, OR	YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	4101830015C
Additional Panels in search area:	4101830005C

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
LINNTON	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	SAUVIE
Soil Surface Texture:	silt loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	15 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.60 Min: 0.20	Max: 6.50 Min: 5.60
2	15 inches	39 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.60 Min: 0.20	Max: 6.50 Min: 5.60
3	39 inches	60 inches	stratified	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 6.50 Min: 6.10

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loamy fine sand
fine sandy loam
sand
silty clay loam
loam
gravelly - loam

Surficial Soil Types: loamy fine sand
fine sandy loam
sand
silty clay loam
loam
gravelly - loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: gravelly - sand
loamy fine sand
fine sandy loam
silty clay
very gravelly - loamy coarse sand

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	USGS0890669	1/2 - 1 Mile NE
A3	USGS0890670	1/2 - 1 Mile NE
B7	USGS0890671	1/2 - 1 Mile NNE
B8	USGS0890605	1/2 - 1 Mile NNE
C11	USGS0890606	1/2 - 1 Mile NNE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

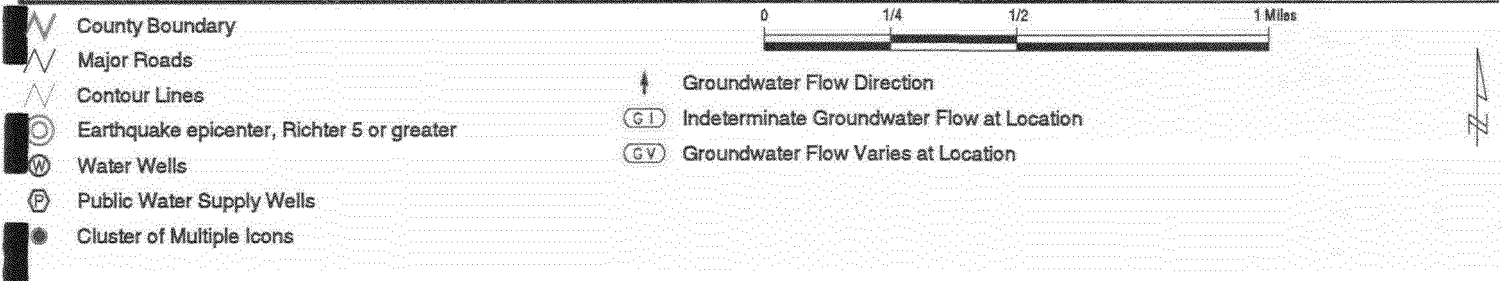
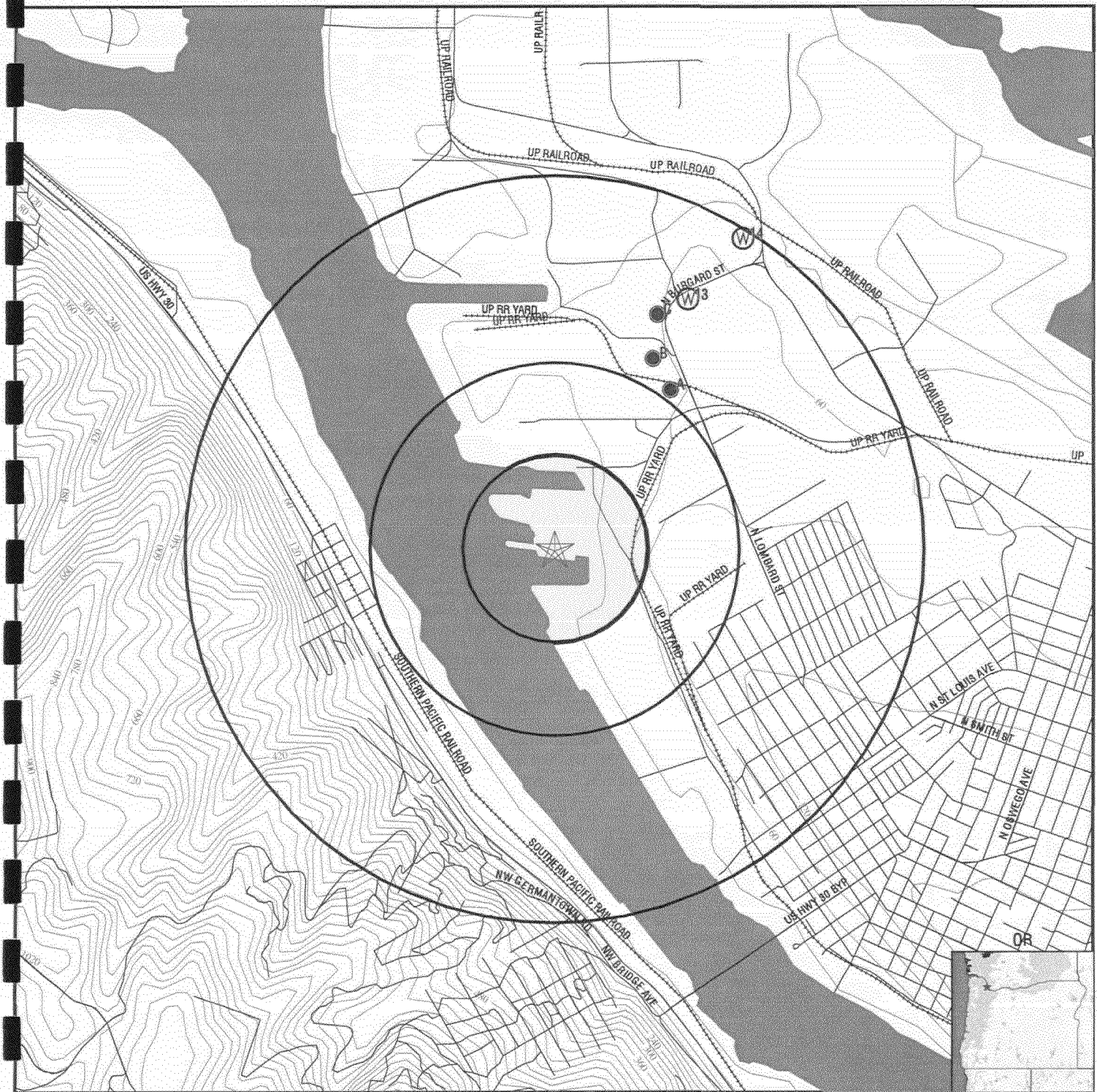
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	OR00000899	1/2 - 1 Mile NE
A4	OR00000889	1/2 - 1 Mile NE
B5	OR00000884	1/2 - 1 Mile NNE
B6	OR00000886	1/2 - 1 Mile NNE
C9	OR00000873	1/2 - 1 Mile NNE
C10	OR00000874	1/2 - 1 Mile NNE
C12	OR00000869	1/2 - 1 Mile NNE
13	OR00000864	1/2 - 1 Mile NNE
14	OR00000858	1/2 - 1 Mile NNE

PHYSICAL SETTING SOURCE MAP - 01215516.1r



TARGET PROPERTY: Kinder Morgan Bulk Terminal Leasehold
ADDRESS: 11040 N Lombard Terminal 4, P
CITY/STATE/ZIP: Portland OR 97203
LAT/LONG: 45.6014 / 122.7745

CUSTOMER: URS Corporation
CONTACT: Matthew Mudge
INQUIRY #: 01215516.1r
DATE: June 21, 2004 8:35 am

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KMB00001044

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A1
NE
1/2 - 1 Mile
Higher

OR WELLS OR00000899

Well ID:	Not Reported	Certificate Number:	0
Application Number:	GR 2698	Point of Division Num.:	1
Permit Number:	GR 2556	Section:	35
Map Name:	2.00N 1.00W	Use:	Domestic
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

A2
NE
1/2 - 1 Mile
Higher

FED USGS USGS0890669

Agency:	USGS	Site ID:	453627122460001
Site Name:	02N/01W-35DDCA		
Dec. Latitude:	45.60734		
Dec. Longitude:	-122.76788		
Coord Sys:	NAD83		
State:	OR		
County:	Multnomah County		
Altitude:	44.		
Hydrologic code:	17090012		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	19431001	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	105.		
Hole depth:	105.	Source:	driller
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

	Feet below	Feet to
Date	Surface	Sealevel

1943-10-13	27.0	

A3
NE
1/2 - 1 Mile
Higher

FED USGS USGS0890670

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency: USGS Site ID: 453629122460101
 Site Name: 02N/01W-35DDDB
 Dec. Latitude: 45.60789
 Dec. Longitude: -122.76815
 Coord Sys: NAD83
 State: OR
 County: Multnomah County
 Altitude: 40.
 Hydrologic code: 17090012
 Topographic: Not Reported
 Site Type: Ground-water other than Spring
 Const Date: 19431101 Inven Date: Not Reported
 Well Type: Single well, other than collector or Ranney type
 Primary Aquifer: Not Reported
 Aquifer type: Not Reported
 Well depth: 120.
 Hole depth: 120. Source: driller
 Project no: Not Reported

Ground-water levels, Number of Measurements: 8

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1989-08-08	28.0		1989-06-06	27.3	
1989-04-03	26.7		1989-02-14	27.8	
1988-12-15	27.4		1988-10-04	28.4	
1988-06-13	27.2		1943-11-11	26.0	

A4
NE
1/2 - 1 Mile
Higher

OR WELLS OR00000889

Well ID:	Not Reported	Certificate Number:	0
Application Number:	GR 2697	Point of Division Num.:	1
Permit Number:	GR 2555	Section:	35
Map Name:	2.00N 1.00W	Use:	Domestic
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

B5
NNE
1/2 - 1 Mile
Higher

OR WELLS OR00000884

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well ID:	Not Reported	Certificate Number:	0
Application Number:	GR 2696	Point of Division Num.:	1
Permit Number:	GR 2554	Section:	35
Map Name:	2.00N 1.00W	Use:	Domestic
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

B6
NNE
1/2 - 1 Mile
Higher

OR WELLS OR00000886

Well ID:	Not Reported	Certificate Number:	0
Application Number:	GR 2699	Point of Division Num.:	1
Permit Number:	GR 2557	Section:	35
Map Name:	2.00N 1.00W	Use:	Domestic
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

B7
NNE
1/2 - 1 Mile
Higher

FED USGS USGS0890671

Agency:	USGS	Site ID:	453632122460301
Site Name:	02N/01W-35DDBD		
Dec. Latitude:	45.60873		
Dec. Longitude:	-122.76871		
Coord Sys:	NAD83		
State:	OR		
County:	Multnomah County		
Altitude:	40.		
Hydrologic code:	17090012		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	19431001	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	121.		
Hole depth:	121.	Source:	driller
Project no:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	-----------------------	---------------------

1943-10-18	26.0	
------------	------	--

B8
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS0890605**

Agency:	USGS	Site ID:	453634122460401
Site Name:	02N/01W-35DDB2		
Dec. Latitude:	45.60928		
Dec. Longitude:	-122.76899		
Coord Sys:	NAD83		
State:	OR		
County:	Multnomah County		
Altitude:	40.		
Hydrologic code:	17090012		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	19430401	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	118.		
Hole depth:	118.	Source:	driller
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	-----------------------	---------------------

1943-04-23	21.0	
------------	------	--

C9
NNE
1/2 - 1 Mile
Higher

OR WELLS **OR00000873**

Well ID:	Not Reported	Certificate Number:	0
Application Number:	GR 2695	Point of Division Num.:	1
Permit Number:	GR 2553	Section:	35
Map Name:	2.00N 1.00W	Use:	Domestic
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C10
NNE
1/2 - 1 Mile
Higher

OR WELLS OR00000874

Well ID:	Not Reported	Certificate Number:	30316
Application Number:	G 1390	Point of Division Num.:	3
Permit Number:	G 1294	Section:	35
Map Name:	2.00N 1.00W	Use:	/Manufacturing
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

C11
NNE
1/2 - 1 Mile
Higher

FED USGS USGS0890606

Agency:	USGS	Site ID:	453638122460301
Site Name:	02N/01W-35DAC		
Dec. Latitude:	45.61039		
Dec. Longitude:	-122.76871		
Coord Sys:	NAD83		
State:	OR		
County:	Multnomah County		
Altitude:	30.		
Hydrologic code:	17090012		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	19430722	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	123.		
Hole depth:	123.	Source:	driller
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1943-07-22	14.0	

C12
NNE
1/2 - 1 Mile
Higher

OR WELLS OR00000869

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well ID:	Not Reported	Certificate Number:	30316
Application Number:	G 1390	Point of Division Num.:	1
Permit Number:	G 1294	Section:	35
Map Name:	2.00N 1.00W	Use:	/Manufacturing
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

13
NNE
1/2 - 1 Mile
Higher

OR WELLS OR00000864

Well ID:	Not Reported	Certificate Number:	30316
Application Number:	G 1390	Point of Division Num.:	2
Permit Number:	G 1294	Section:	35
Map Name:	2.00N 1.00W	Use:	/Manufacturing
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

14
NNE
1/2 - 1 Mile
Higher

OR WELLS OR00000858

Well ID:	Not Reported	Certificate Number:	0
Application Number:	GR 4169	Point of Division Num.:	1
Permit Number:	GR 3729	Section:	36
Map Name:	2.00N 1.00W	Use:	Domestic
Source:	Not Reported	Station:	0
List:	0	Y Coordinate:	0
X Coordinate:	0	Longitude:	0
Latitude:	0	Data Source:	Not Reported
Aquifer Type:	Not Reported	Altitude:	0
Water Use:	Not Reported	Depth:	0
Well Type:	Not Reported	County Code:	Not Reported
Description:	Not Reported		
Water Level:	0		
Well:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: OR Radon

Radon Test Results

Zip	Total Sites	Min pCi/L	Max pCi/L	Avg pCi/L	>4 pCi/L
97203	55	0.1	9.6	2.5	11

Federal EPA Radon Zone for MULTNOMAH County: 2

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MULTNOMAH COUNTY, OR

Number of sites tested: 33

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	1.530 pCi/L	91%	9%	0%
Basement	2.630 pCi/L	57%	43%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Oregon Digitized Wells

Source: Water Resources Department
Telephone: 503-378-8455

RADON

State Database: OR Radon

Source: Oregon Health Services
Telephone: 503-731-4272
Radon Levels in Oregon

Area Radon Information

Source: USGS
Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Appendix K
EDR Database Report Supplement

URS



EDR™ Environmental
Data Resources Inc

EDR Site Report™

**UNION PACIFIC RR AT TERMINAL 4
11040 N LOMBARD ST
PORTLAND, OR 97203**

Inquiry Number:

July 13, 2004

**The Standard in
Environmental Risk
Management Information**

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

The EDR-Site Report™ is a comprehensive presentation of government filings on a facility identified in a search of over 4 million government records from more than 600 federal, state and local environmental databases. The report is divided into three sections:

Section 1: Facility Summary Page 3

Summary of facility filings including a review of the following areas: waste management, waste disposal, multi-media issues, and Superfund liability.

Section 2: Facility Detail Reports Page 4

All available detailed information from databases where sites are identified.

Section 3: Databases Searched and Update Information. Page 5

Name, source, update dates, contact phone number and description of each of the databases searched for this report.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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SECTION 1: FACILITY SUMMARY

FACILITY	FACILITY 1 UNION PACIFIC RR AT TERMINAL 4 11040 N LOMBARD ST PORTLAND, OR 97203 EDR ID #S105075898
AREA	
WASTE MANAGEMENT Facility generates hazardous waste (RCRIS)	NO
Facility treats, stores, or disposes of hazardous waste on-site (RCRIS/TSDF)	NO
Facility has received Notices of Violations (RCRIS/VIOL)	NO
Facility has been subject to RCRA administrative actions (RAATS)	NO
Facility has been subject to corrective actions (CORRACTS)	NO
Facility handles PCBs (PADS)	NO
Facility uses radioactive materials (MLTS)	NO
Facility manages registered aboveground storage tanks (AST)	NO
Facility manages registered underground storage tanks (UST)	NO
Facility has reported leaking underground storage tank incidents (LUST)	YES - p4
Facility has reported emergency releases to the soil (ERNS)	NO
Facility has reported hazardous material incidents to DOT (HMIRS)	NO
WASTE DISPOSAL Facility is a Superfund Site (NPL)	NO
Facility has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS)	NO
Facility has a reported Superfund Lien on it (LIENS)	NO
Facility is listed as a state hazardous waste site (SHWS)	NO
Facility has disposed of solid waste on-site (SWF/LF)	NO
MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)	NO
Facility produces pesticides and has notified EPA under Section 7 of FIFRA (SSTS)	NO
Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)	NO
Facility has inspections under FIFRA, TSCA or EPCRA (FTTS)	NO
Facility is listed in EPA's index system (FINDS)	NO
Facility is listed in a county/local unique database (LOCAL)	NO
POTENTIAL SUPERFUND LIABILITY Facility has a list of potentially responsible parties PRP	NO
TOTAL (YES)	1

SECTION 2: FACILITY DETAIL REPORTS

WASTE MANAGEMENT

Facility has reported leaking underground storage tank incidents

DATABASE: Leaking Petroleum Storage Tank Database (LUST)

UNION PACIFIC RR AT TERMINAL 4
11040 N LOMBARD ST
PORTLAND, OR 97203
EDR ID #S105075898

LUST:
Facility ID: 26-01-6491
Region: North Western Region
Clean Lead: Not reported
Cleanup Start: 19JUL2001
Closed Date: 29AUG2001
Cleanup Complete: 29AUG2001

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

To maintain currency of the following federal, state and local databases, EDR contacts the appropriate government agency on a monthly or quarterly basis as required.

Elapsed ASTM days: Provides confirmation that this report meets or exceeds the 90-day updating requirement of the ASTM standard.

WASTE MANAGEMENT

RCRIS: Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 04/13/2004
Database Release Frequency: Varies

Date of Last EDR Contact: 06/23/2004
Date of Next Scheduled Update: 08/23/2004

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/2001
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/22/2004
Date of Next Scheduled Update: 09/13/2004

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/30/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 05/12/2004
Date of Next Scheduled Update: 08/09/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/19/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004
Date of Next Scheduled Update: 10/04/2004

OR UST: Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5815

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/07/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

OR LUST: Leaking Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5790

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/06/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2003
Database Release Frequency: Annually

Date of Last EDR Contact: 04/26/2004
Date of Next Scheduled Update: 07/26/2004

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/17/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 04/20/2004
Date of Next Scheduled Update: 07/19/2004

WASTE DISPOSAL

NPL: National Priority List

Source: EPA

Telephone: Not reported

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

PROPOSED NPL: Proposed National Priority List Sites

Source: EPA

Telephone: Not reported

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

DELISTED NPL: National Priority List Deletions

Source: EPA

Telephone: Not reported

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2004

Date Made Active at EDR: 05/21/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/04/2004

Elapsed ASTM Days: 17

Date of Last EDR Contact: 05/04/2004

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/26/2004

Date Made Active at EDR: 04/02/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/22/2004

Elapsed ASTM Days: 11

Date of Last EDR Contact: 06/23/2004

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 02/26/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/2004

Date of Next Scheduled Update: 09/20/2004

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Date Made Active at EDR: 03/30/1994

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 02/02/1994

Elapsed ASTM Days: 56

Date of Last EDR Contact: 05/24/2004

OR SHWS:

OR SWF/LF: Solid Waste Facilities List

Source: Department of Environmental Quality

Telephone: 503-229-6299

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/21/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/06/2004

Date of Next Scheduled Update: 09/20/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

MULTIMEDIA

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2001

Database Release Frequency: Annually

Date of Last EDR Contact: 06/22/2004

Date of Next Scheduled Update: 09/20/2004

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2001

Database Release Frequency: Annually

Date of Last EDR Contact: 04/19/2004

Date of Next Scheduled Update: 07/19/2004

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002

Database Release Frequency: N/A

Date of Last EDR Contact: 06/07/2004

Date of Next Scheduled Update: 09/06/2004

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/13/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004

Date of Next Scheduled Update: 09/20/2004

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/13/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004

Date of Next Scheduled Update: 09/20/2004

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA

Telephone: Not reported

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/08/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004

Date of Next Scheduled Update: 10/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

ECSI: Environmental Cleanup Site Information System
Source: Department of Environmental Quality
Telephone: 503-229-6629
Sites that are or may be contaminated and may require cleanup.

Date of Government Version: 05/01/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/19/2004
Date of Next Scheduled Update: 08/16/2004

OR DRY CLEAN: Drycleaning Facilities
Source: Department of Environmental Quality
Telephone: 503-229-6783
A listing of registered drycleaning facilities in Oregon.

Date of Government Version: 06/04/2004
Database Release Frequency: Varies

Date of Last EDR Contact: 06/04/2004
Date of Next Scheduled Update: 08/30/2004

OR CDL:

OR HISTORICAL LANDFILLS:

OR INSTITUTIONAL CONTROL:

OR BROWNFIELDS: Brownfields Projects
Source: Department of Environmental Quality
Telephone: 503-229-6801
Brownfields investigations and/or cleanups that have been conducted in Oregon.

Date of Government Version: 03/16/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/16/2004
Date of Next Scheduled Update: 09/13/2004

OR SPILLS: Spill Data
Source: Department of Environmental Quality
Telephone: 503-229-5731

Date of Government Version: 06/07/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/15/2004
Date of Next Scheduled Update: 09/13/2004

CRL: Confirmed Release List and Inventory
Source: Department of Environmental Quality
Telephone: 503-229-6170
All facilities with a confirmed release.

Date of Government Version: 03/16/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/16/2004
Date of Next Scheduled Update: 09/13/2004

VCS:

OR HAZMAT: Hazmat/Incidents
Source: State Fire Marshal's Office
Telephone: 503-373-1540
Hazardous material incidents reported to the State Fire Marshal by emergency responders. The hazardous material may or may not have been released.

Date of Government Version: 03/03/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/24/2004
Date of Next Scheduled Update: 08/23/2004

HSIS: Hazardous Substance Information Survey
Source: State Fire Marshal's Office
Telephone: 503-373-1540
Companies in Oregon submitting the Hazardous Substance Information Survey and either reporting or not reporting hazardous substances.

Date of Government Version: 03/01/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/01/2004
Date of Next Scheduled Update: 08/30/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

OR INDIAN UST:

OR INDIAN LUST:

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. (C) Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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POTENTIAL SUPERFUND LIABILITY

PRP: Potentially Responsible Parties

Source: EPA

Telephone: 202-564-6064

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/22/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/23/2004

Date of Next Scheduled Update: 07/05/2004



EDR™ Environmental
Data Resources Inc

EDR Site Report™

**PORT OF PORTLAND
11040 N LOMBARD
PORTLAND, OR 97203**

Inquiry Number:

July 13, 2004

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

The EDR-Site Report™ is a comprehensive presentation of government filings on a facility identified in a search of over 4 million government records from more than 600 federal, state and local environmental databases. The report is divided into three sections:

Section 1: Facility Summary Page 3

Summary of facility filings including a review of the following areas: waste management, waste disposal, multi-media issues, and Superfund liability.

Section 2: Facility Detail Reports Page 4

All available detailed information from databases where sites are identified.

Section 3: Databases Searched and Update Information. Page 5

Name, source, update dates, contact phone number and description of each of the databases searched for this report.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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SECTION 1: FACILITY SUMMARY

FACILITY AREA	FACILITY 1 PORT OF PORTLAND 11040 N LOMBARD PORTLAND, OR 97203 EDR ID #U003580503
WASTE MANAGEMENT Facility generates hazardous waste (RCRIS)	NO
Facility treats, stores, or disposes of hazardous waste on-site (RCRIS/TSDF)	NO
Facility has received Notices of Violations (RCRIS/VIOL)	NO
Facility has been subject to RCRA administrative actions (RAATS)	NO
Facility has been subject to corrective actions (CORRACTS)	NO
Facility handles PCBs (PADS)	NO
Facility uses radioactive materials (MLTS)	NO
Facility manages registered aboveground storage tanks (AST)	NO
Facility manages registered underground storage tanks (UST)	NO
Facility has reported leaking underground storage tank incidents (LUST)	YES - p4
Facility has reported emergency releases to the soil (ERNS)	NO
Facility has reported hazardous material incidents to DOT (HMIRS)	NO
WASTE DISPOSAL Facility is a Superfund Site (NPL)	NO
Facility has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS)	NO
Facility has a reported Superfund Lien on it (LIENS)	NO
Facility is listed as a state hazardous waste site (SHWS)	NO
Facility has disposed of solid waste on-site (SWF/LF)	NO
MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)	NO
Facility produces pesticides and has notified EPA under Section 7 of FIFRA (SSTS)	NO
Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)	NO
Facility has inspections under FIFRA, TSCA or EPCRA (FTTS)	NO
Facility is listed in EPA's index system (FINDS)	NO
Facility is listed in a county/local unique database (LOCAL)	NO
POTENTIAL SUPERFUND LIABILITY Facility has a list of potentially responsible parties PRP	NO
TOTAL (YES)	1

SECTION 2: FACILITY DETAIL REPORTS

WASTE MANAGEMENT

Facility has reported leaking underground storage tank incidents

DATABASE: Leaking Petroleum Storage Tank Database (LUST)

PORT OF PORTLAND
11040 N LOMBARD
PORTLAND, OR 97203
EDR ID #U003580503

LUST:

Facility ID:	26-95-0277
Region:	North Western Region
Clean Lead:	Not reported
Cleanup Start:	19OCT1995
Closed Date:	05MAR1996
Cleanup Complete:	28DEC1995

Facility ID:	26-96-0454
Region:	North Western Region
Clean Lead:	Not reported
Cleanup Start:	01AUG1996
Closed Date:	07FEB1997
Cleanup Complete:	19NOV1996

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

To maintain currency of the following federal, state and local databases, EDR contacts the appropriate government agency on a monthly or quarterly basis as required.

Elapsed ASTM days: Provides confirmation that this report meets or exceeds the 90-day updating requirement of the ASTM standard.

WASTE MANAGEMENT

RCRIS: Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDs treat, store, or dispose of the waste.

Date of Government Version: 04/13/2004
Database Release Frequency: Varies

Date of Last EDR Contact: 06/23/2004
Date of Next Scheduled Update: 08/23/2004

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/2001
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/22/2004
Date of Next Scheduled Update: 09/13/2004

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/30/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 05/12/2004
Date of Next Scheduled Update: 08/09/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/19/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004
Date of Next Scheduled Update: 10/04/2004

OR UST: Underground Storage Tank Database

Source: Department of Environmental Quality
Telephone: 503-229-5815

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/07/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

OR LUST: Leaking Underground Storage Tank Database

Source: Department of Environmental Quality
Telephone: 503-229-5790

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/06/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2003
Database Release Frequency: Annually

Date of Last EDR Contact: 04/26/2004
Date of Next Scheduled Update: 07/26/2004

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation
Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/17/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 04/20/2004
Date of Next Scheduled Update: 07/19/2004

WASTE DISPOSAL

NPL: National Priority List

Source: EPA
Telephone: Not reported

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

PROPOSED NPL: Proposed National Priority List Sites

Source: EPA
Telephone: Not reported

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

DELISTED NPL: National Priority List Deletions

Source: EPA

Telephone: Not reported

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2004

Date Made Active at EDR: 05/21/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/04/2004

Elapsed ASTM Days: 17

Date of Last EDR Contact: 05/04/2004

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/26/2004

Date Made Active at EDR: 04/02/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/22/2004

Elapsed ASTM Days: 11

Date of Last EDR Contact: 06/23/2004

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 02/26/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/2004

Date of Next Scheduled Update: 09/20/2004

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Date Made Active at EDR: 03/30/1994

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 02/02/1994

Elapsed ASTM Days: 56

Date of Last EDR Contact: 05/24/2004

OR SHWS:

OR SWF/LF: Solid Waste Facilities List

Source: Department of Environmental Quality

Telephone: 503-229-6299

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/21/2004

Database Release Frequency: Semi-Annually

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Date of Next Scheduled Update: 09/20/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

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TRIS: Toxic Chemical Release Inventory System

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Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2001
Database Release Frequency: Annually

Date of Last EDR Contact: 06/22/2004
Date of Next Scheduled Update: 09/20/2004

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2001
Database Release Frequency: Annually

Date of Last EDR Contact: 04/19/2004
Date of Next Scheduled Update: 07/19/2004

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Database Release Frequency: N/A

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/13/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004
Date of Next Scheduled Update: 09/20/2004

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/13/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004
Date of Next Scheduled Update: 09/20/2004

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA

Telephone: Not reported

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/08/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004
Date of Next Scheduled Update: 10/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

ECSI: Environmental Cleanup Site Information System

Source: Department of Environmental Quality

Telephone: 503-229-6629

Sites that are or may be contaminated and may require cleanup.

Date of Government Version: 05/01/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/19/2004

Date of Next Scheduled Update: 08/16/2004

OR DRY CLEAN: Drycleaning Facilities

Source: Department of Environmental Quality

Telephone: 503-229-6783

A listing of registered drycleaning facilities in Oregon.

Date of Government Version: 06/04/2004

Database Release Frequency: Varies

Date of Last EDR Contact: 06/04/2004

Date of Next Scheduled Update: 08/30/2004

OR CDL:

OR HISTORICAL LANDFILLS:

OR INSTITUTIONAL CONTROL:

OR BROWNFIELDS: Brownfields Projects

Source: Department of Environmental Quality

Telephone: 503-229-6801

Brownfields investigations and/or cleanups that have been conducted in Oregon.

Date of Government Version: 03/16/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/16/2004

Date of Next Scheduled Update: 09/13/2004

OR SPILLS: Spill Data

Source: Department of Environmental Quality

Telephone: 503-229-5731

Date of Government Version: 06/07/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/15/2004

Date of Next Scheduled Update: 09/13/2004

CRL: Confirmed Release List and Inventory

Source: Department of Environmental Quality

Telephone: 503-229-6170

All facilities with a confirmed release.

Date of Government Version: 03/16/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/16/2004

Date of Next Scheduled Update: 09/13/2004

VCS:

OR HAZMAT: Hazmat/Incidents

Source: State Fire Marshal's Office

Telephone: 503-373-1540

Hazardous material incidents reported to the State Fire Marshal by emergency responders. The hazardous material may or may not have been released.

Date of Government Version: 03/03/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/24/2004

Date of Next Scheduled Update: 08/23/2004

HSIS: Hazardous Substance Information Survey

Source: State Fire Marshal's Office

Telephone: 503-373-1540

Companies in Oregon submitting the Hazardous Substance Information Survey and either reporting or not reporting hazardous substances.

Date of Government Version: 03/01/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/01/2004

Date of Next Scheduled Update: 08/30/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

OR INDIAN UST:

OR INDIAN LUST:

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POTENTIAL SUPERFUND LIABILITY

PRP: Potentially Responsible Parties

Source: EPA

Telephone: 202-564-6064

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/22/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/23/2004

Date of Next Scheduled Update: 07/05/2004



EDR™ Environmental
Data Resources Inc

EDR Site Report™

**PORT OF PORTLAND, TERMINAL 4
11040 N LOMBARD ST
PORTLAND, OR 97203**

Inquiry Number:

July 13, 2004

**The Standard in
Environmental Risk
Management Information**

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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The EDR-Site Report™ is a comprehensive presentation of government filings on a facility identified in a search of over 4 million government records from more than 600 federal, state and local environmental databases. The report is divided into three sections:

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Section 2: Facility Detail Reports Page 4

All available detailed information from databases where sites are identified.

Section 3: Databases Searched and Update Information. Page 6

Name, source, update dates, contact phone number and description of each of the databases searched for this report.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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SECTION 1: FACILITY SUMMARY

FACILITY AREA	FACILITY 1 PORT OF PORTLAND, TERMINAL 4 11040 N LOMBARD ST PORTLAND, OR 97203 EDR ID #S100497126
WASTE MANAGEMENT Facility generates hazardous waste (RCRIS)	NO
Facility treats, stores, or disposes of hazardous waste on-site (RCRIS/TSD)	NO
Facility has received Notices of Violations (RCRIS/VIOL)	NO
Facility has been subject to RCRA administrative actions (RAATS)	NO
Facility has been subject to corrective actions (CORRACTS)	NO
Facility handles PCBs (PADS)	NO
Facility uses radioactive materials (MLTS)	NO
Facility manages registered aboveground storage tanks (AST)	NO
Facility manages registered underground storage tanks (UST)	NO
Facility has reported leaking underground storage tank incidents (LUST)	YES - p4
Facility has reported emergency releases to the soil (ERNS)	NO
Facility has reported hazardous material incidents to DOT (HMIRS)	NO
WASTE DISPOSAL Facility is a Superfund Site (NPL)	NO
Facility has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS)	NO
Facility has a reported Superfund Lien on it (LIENS)	NO
Facility is listed as a state hazardous waste site (SHWS)	NO
Facility has disposed of solid waste on-site (SWF/LF)	NO
MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)	NO
Facility produces pesticides and has notified EPA under Section 7 of FIFRA (SSTS)	NO
Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)	NO
Facility has inspections under FIFRA, TSCA or EPCRA (FTTS)	NO
Facility is listed in EPA's index system (FINDS)	NO
Facility is listed in a county/local unique database (LOCAL)	YES - p5
POTENTIAL SUPERFUND LIABILITY Facility has a list of potentially responsible parties PRP	NO
TOTAL (YES)	2

SECTION 2: FACILITY DETAIL REPORTS

WASTE MANAGEMENT

Facility has reported leaking underground storage tank incidents

DATABASE: Leaking Petroleum Storage Tank Database (LUST)

PORT OF PORTLAND, TERMINAL 4
11040 N LOMBARD ST
PORTLAND, OR 97203
EDR ID #S100497126

LUST:

Facility ID:	26-91-0126
Region:	North Western Region
Clean Lead:	Responsible Person
Cleanup Start:	22MAR1991
Closed Date:	16FEB1996
Cleanup Complete:	13OCT1995

Facility ID:	26-91-0133
Region:	North Western Region
Clean Lead:	Responsible Person
Cleanup Start:	20MAR1991
Closed Date:	29SEP2003
Cleanup Complete:	15SEP2003

SECTION 2: FACILITY DETAIL REPORTS

...Continued...

MULTIMEDIA

Facility is listed in a county/local unique database

DATABASE: State/County (LOCAL)

PORT OF PORTLAND, TERMINAL 4
11040 N LOMBARD ST
PORTLAND, OR 97203
EDR ID #S100497126

Database: OR SPILLS

OR SPILLS:

Facility ID:	Not reported	Spill Date:	10MAR1997
Material:	Not reported	Quantity:	Not reported
Release Date:	03/10/1997	Year:	97
How Occurred:	Not reported	OERS Number	Not reported
Source:	Not reported	Media	Not reported
Materials:	Not reported		
Location:	Not reported		
Description:	Rain water flowed off the deck and caused sheen in river. Semena, Bulk carrier in port.		

Facility ID:	Not reported	Spill Date:	19APR1997
Material:	Not reported	Quantity:	Not reported
Release Date:	04/19/1997	Year:	97
How Occurred:	Not reported	OERS Number	Not reported
Source:	Not reported	Media	Not reported
Materials:	Not reported		
Location:	Not reported		
Description:	Lube oil from cable in water and on ground caused by cable hitting the ground. sheen on water.		

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

To maintain currency of the following federal, state and local databases, EDR contacts the appropriate government agency on a monthly or quarterly basis as required.

Elapsed ASTM days: Provides confirmation that this report meets or exceeds the 90-day updating requirement of the ASTM standard.

WASTE MANAGEMENT

RCRIS: Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 04/13/2004
Database Release Frequency: Varies

Date of Last EDR Contact: 06/23/2004
Date of Next Scheduled Update: 08/23/2004

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/2001
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/22/2004
Date of Next Scheduled Update: 09/13/2004

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/30/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 05/12/2004
Date of Next Scheduled Update: 08/09/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/19/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004
Date of Next Scheduled Update: 10/04/2004

OR UST: Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5815

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/07/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

OR LUST: Leaking Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5790

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/06/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2003
Database Release Frequency: Annually

Date of Last EDR Contact: 04/26/2004
Date of Next Scheduled Update: 07/26/2004

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/17/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 04/20/2004
Date of Next Scheduled Update: 07/19/2004

WASTE DISPOSAL

NPL: National Priority List

Source: EPA

Telephone: Not reported

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

PROPOSED NPL: Proposed National Priority List Sites

Source: EPA

Telephone: Not reported

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

DELISTED NPL: National Priority List Deletions

Source: EPA

Telephone: Not reported

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2004

Date Made Active at EDR: 05/21/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/04/2004

Elapsed ASTM Days: 17

Date of Last EDR Contact: 05/04/2004

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/26/2004

Date Made Active at EDR: 04/02/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/22/2004

Elapsed ASTM Days: 11

Date of Last EDR Contact: 06/23/2004

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 02/26/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/2004

Date of Next Scheduled Update: 09/20/2004

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Date Made Active at EDR: 03/30/1994

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 02/02/1994

Elapsed ASTM Days: 56

Date of Last EDR Contact: 05/24/2004

OR SHWS:

OR SWF/LF: Solid Waste Facilities List

Source: Department of Environmental Quality

Telephone: 503-229-6299

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/21/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/06/2004

Date of Next Scheduled Update: 09/20/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

MULTIMEDIA

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2001

Database Release Frequency: Annually

Date of Last EDR Contact: 06/22/2004

Date of Next Scheduled Update: 09/20/2004

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2001

Database Release Frequency: Annually

Date of Last EDR Contact: 04/19/2004

Date of Next Scheduled Update: 07/19/2004

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002

Database Release Frequency: N/A

Date of Last EDR Contact: 06/07/2004

Date of Next Scheduled Update: 09/06/2004

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/13/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004

Date of Next Scheduled Update: 09/20/2004

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/13/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004

Date of Next Scheduled Update: 09/20/2004

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA

Telephone: Not reported

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/08/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004

Date of Next Scheduled Update: 10/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

ECSI: Environmental Cleanup Site Information System
Source: Department of Environmental Quality
Telephone: 503-229-6629
Sites that are or may be contaminated and may require cleanup.

Date of Government Version: 05/01/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/19/2004
Date of Next Scheduled Update: 08/16/2004

OR DRY CLEAN: Drycleaning Facilities
Source: Department of Environmental Quality
Telephone: 503-229-6783
A listing of registered drycleaning facilities in Oregon.

Date of Government Version: 06/04/2004
Database Release Frequency: Varies

Date of Last EDR Contact: 06/04/2004
Date of Next Scheduled Update: 08/30/2004

OR CDL:

OR HISTORICAL LANDFILLS:

OR INSTITUTIONAL CONTROL:

OR BROWNFIELDS: Brownfields Projects
Source: Department of Environmental Quality
Telephone: 503-229-6801
Brownfields investigations and/or cleanups that have been conducted in Oregon.

Date of Government Version: 03/16/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/16/2004
Date of Next Scheduled Update: 09/13/2004

OR SPILLS: Spill Data
Source: Department of Environmental Quality
Telephone: 503-229-5731

Date of Government Version: 06/07/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/15/2004
Date of Next Scheduled Update: 09/13/2004

CRL: Confirmed Release List and Inventory
Source: Department of Environmental Quality
Telephone: 503-229-6170
All facilities with a confirmed release.

Date of Government Version: 03/16/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/16/2004
Date of Next Scheduled Update: 09/13/2004

VCS:

OR HAZMAT: Hazmat/Incidents
Source: State Fire Marshal's Office
Telephone: 503-373-1540
Hazardous material incidents reported to the State Fire Marshal by emergency responders. The hazardous material may or may not have been released.

Date of Government Version: 03/03/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/24/2004
Date of Next Scheduled Update: 08/23/2004

HSIS: Hazardous Substance Information Survey
Source: State Fire Marshal's Office
Telephone: 503-373-1540
Companies in Oregon submitting the Hazardous Substance Information Survey and either reporting or not reporting hazardous substances.

Date of Government Version: 03/01/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/01/2004
Date of Next Scheduled Update: 08/30/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

OR INDIAN UST:

OR INDIAN LUST:

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. (C) Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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POTENTIAL SUPERFUND LIABILITY

PRP: Potentially Responsible Parties

Source: EPA

Telephone: 202-564-6064

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/22/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/23/2004

Date of Next Scheduled Update: 07/05/2004



EDR™ Environmental
Data Resources Inc

EDR Site Report™

**INTERNATIONAL RAW MATERIALS LT
11040 N LOMBARD ST TERM 4
PORTLAND, OR 97203**

Inquiry Number:

July 13, 2004

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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All available detailed information from databases where sites are identified.

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Name, source, update dates, contact phone number and description of each of the databases searched for this report.

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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SECTION 1: FACILITY SUMMARY

FACILITY AREA	FACILITY 1 INTERNATIONAL RAW MATERIALS LT 11040 N LOMBARD ST TERM 4 PORTLAND, OR 97203 EDR ID #S104053508
WASTE MANAGEMENT Facility generates hazardous waste (RCRIS)	NO
Facility treats, stores, or disposes of hazardous waste on-site (RCRIS/TSD)	NO
Facility has received Notices of Violations (RCRIS/VIOL)	NO
Facility has been subject to RCRA administrative actions (RAATS)	NO
Facility has been subject to corrective actions (CORRACTS)	NO
Facility handles PCBs (PADS)	NO
Facility uses radioactive materials (MLTS)	NO
Facility manages registered aboveground storage tanks (AST)	NO
Facility manages registered underground storage tanks (UST)	NO
Facility has reported leaking underground storage tank incidents (LUST)	NO
Facility has reported emergency releases to the soil (ERNS)	NO
Facility has reported hazardous material incidents to DOT (HMIRS)	NO
WASTE DISPOSAL Facility is a Superfund Site (NPL)	NO
Facility has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS)	NO
Facility has a reported Superfund Lien on it (LIENS)	NO
Facility is listed as a state hazardous waste site (SHWS)	NO
Facility has disposed of solid waste on-site (SWF/LF)	NO
MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)	NO
Facility produces pesticides and has notified EPA under Section 7 of FIFRA (SSTS)	NO
Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)	NO
Facility has inspections under FIFRA, TSCA or EPCRA (FTTS)	NO
Facility is listed in EPA's index system (FINDS)	NO
Facility is listed in a county/local unique database (LOCAL)	YES - p4
POTENTIAL SUPERFUND LIABILITY Facility has a list of potentially responsible parties PRP	NO
TOTAL (YES)	1

SECTION 2: FACILITY DETAIL REPORTS

MULTIMEDIA

Facility is listed in a county/local unique database

DATABASE: State/County (LOCAL)

INTERNATIONAL RAW MATERIALS LT
11040 N LOMBARD ST TERM 4
PORTLAND, OR 97203
EDR ID #S104053508

Database: OR HSIS

HSIS:

Emergency Contact:	DON GLEAVE
Emergency Procedure:	OFFICE
Chemical Trade Name:	PROPANE
Most Hazardous:	PROPANE
Manager Name:	DON GLEAVE
Mailing Address:	INDEPENDENCE MALL EAST PHILADELPHIA, PA 19106 5038039009 014428
Day Phone:	4
Employee File #:	Yes
No. of Employees:	THIRD PARTY STORAGE
Placard:	No
Business Type:	Not reported
Sprinkler System:	5032861601
Date Form Completed:	Not reported
Business Phone:	Yes
Department Or Division Of Company:	INTERNATIONAL RAW MATERIALS LT
Facility Has Written Emergency Plan:	0291
Company Name:	Not reported
Fire Dept Code:	GAS
Physical State :	04
Physical State Of The Substance:	50-199
Average Amount Possessed During The Year Code:	04
Description Of The Avg Qnty Code:	50-199
Maximum Amount Possessed During The Year Code:	2
Description Of The Max Qnty Code:	GALLONS
Applicable Unit Of Measure Code:	L
Description Of The Unit Of Measure:	CYLINDER
Storage Container:	2
Type Code:	4
Description:	365
Pressure of Hazardous Substance Code:	False
Temperature of The Hazardous Substance Code:	1075
Days The Hazardous Substance Is On Site During Year:	74986
Is The Substance Protected A Trade Secret:	2.1
United Nations/north America 4 Digit Classification Number:	Flammable Gases
Chemical Abstract Service Identifier Number:	6.3
First Hazardous Classification Code For Chemical:	Acute Health Hazard
Hazard Classification 1 Of The Chemical:	Not reported
Second Hazardous Classification Code For Chemical:	Not reported
Hazard Classification 2 Of The Chemical:	Pure
Third Hazardous Classification Code For Chemical:	2
Hazard Classification 3 Of The Chemical:	No
Is Substance Pure Or Mixture:	No
Hazard Rank:	No
Chemical Is An Extremely Hazardous Substance (ehs):	No
Does The Chemical Contain A 112r Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	
EPA Pesticide Registration Number:	
Sic Code:	4931 - OTHER WAREHOUSING & STORAGE

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

To maintain currency of the following federal, state and local databases, EDR contacts the appropriate government agency on a monthly or quarterly basis as required.

Elapsed ASTM days: Provides confirmation that this report meets or exceeds the 90-day updating requirement of the ASTM standard.

WASTE MANAGEMENT

RCRIS: Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 04/13/2004
Database Release Frequency: Varies

Date of Last EDR Contact: 06/23/2004
Date of Next Scheduled Update: 08/23/2004

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/2001
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/22/2004
Date of Next Scheduled Update: 09/13/2004

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2004
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/07/2004
Date of Next Scheduled Update: 09/06/2004

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/30/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 05/12/2004
Date of Next Scheduled Update: 08/09/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/19/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004
Date of Next Scheduled Update: 10/04/2004

OR UST: Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5815

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/07/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

OR LUST: Leaking Underground Storage Tank Database

Source: Department of Environmental Quality

Telephone: 503-229-5790

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/06/2004
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/2004
Date of Next Scheduled Update: 09/13/2004

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2003
Database Release Frequency: Annually

Date of Last EDR Contact: 04/26/2004
Date of Next Scheduled Update: 07/26/2004

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/17/2004
Database Release Frequency: Annually

Date of Last EDR Contact: 04/20/2004
Date of Next Scheduled Update: 07/19/2004

WASTE DISPOSAL

NPL: National Priority List

Source: EPA

Telephone: Not reported

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

PROPOSED NPL: Proposed National Priority List Sites

Source: EPA

Telephone: Not reported

Date of Government Version: 04/27/2004
Date Made Active at EDR: 05/21/2004
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/04/2004
Elapsed ASTM Days: 17
Date of Last EDR Contact: 05/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

DELISTED NPL: National Priority List Deletions

Source: EPA

Telephone: Not reported

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2004

Date Made Active at EDR: 05/21/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/04/2004

Elapsed ASTM Days: 17

Date of Last EDR Contact: 05/04/2004

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/26/2004

Date Made Active at EDR: 04/02/2004

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/22/2004

Elapsed ASTM Days: 11

Date of Last EDR Contact: 06/23/2004

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 02/26/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/2004

Date of Next Scheduled Update: 09/20/2004

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Date Made Active at EDR: 03/30/1994

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 02/02/1994

Elapsed ASTM Days: 56

Date of Last EDR Contact: 05/24/2004

OR SHWS:

OR SWF/LF: Solid Waste Facilities List

Source: Department of Environmental Quality

Telephone: 503-229-6299

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/21/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/06/2004

Date of Next Scheduled Update: 09/20/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

MULTIMEDIA

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2001

Database Release Frequency: Annually

Date of Last EDR Contact: 06/22/2004

Date of Next Scheduled Update: 09/20/2004

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2001

Database Release Frequency: Annually

Date of Last EDR Contact: 04/19/2004

Date of Next Scheduled Update: 07/19/2004

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002

Database Release Frequency: N/A

Date of Last EDR Contact: 06/07/2004

Date of Next Scheduled Update: 09/06/2004

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/13/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004

Date of Next Scheduled Update: 09/20/2004

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/13/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/21/2004

Date of Next Scheduled Update: 09/20/2004

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA

Telephone: Not reported

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/08/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/2004

Date of Next Scheduled Update: 10/04/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

ECSI: Environmental Cleanup Site Information System

Source: Department of Environmental Quality

Telephone: 503-229-6629

Sites that are or may be contaminated and may require cleanup.

Date of Government Version: 05/01/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/19/2004

Date of Next Scheduled Update: 08/16/2004

OR DRY CLEAN: Drycleaning Facilities

Source: Department of Environmental Quality

Telephone: 503-229-6783

A listing of registered drycleaning facilities in Oregon.

Date of Government Version: 06/04/2004

Database Release Frequency: Varies

Date of Last EDR Contact: 06/04/2004

Date of Next Scheduled Update: 08/30/2004

OR CDL:

OR HISTORICAL LANDFILLS:

OR INSTITUTIONAL CONTROL:

OR BROWNFIELDS: Brownfields Projects

Source: Department of Environmental Quality

Telephone: 503-229-6801

Brownfields investigations and/or cleanups that have been conducted in Oregon.

Date of Government Version: 03/16/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/16/2004

Date of Next Scheduled Update: 09/13/2004

OR SPILLS: Spill Data

Source: Department of Environmental Quality

Telephone: 503-229-5731

Date of Government Version: 06/07/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/15/2004

Date of Next Scheduled Update: 09/13/2004

CRL: Confirmed Release List and Inventory

Source: Department of Environmental Quality

Telephone: 503-229-6170

All facilities with a confirmed release.

Date of Government Version: 03/16/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/16/2004

Date of Next Scheduled Update: 09/13/2004

VCS:

OR HAZMAT: Hazmat/Incidents

Source: State Fire Marshal's Office

Telephone: 503-373-1540

Hazardous material incidents reported to the State Fire Marshal by emergency responders. The hazardous material may or may not have been released.

Date of Government Version: 03/03/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/24/2004

Date of Next Scheduled Update: 08/23/2004

HSIS: Hazardous Substance Information Survey

Source: State Fire Marshal's Office

Telephone: 503-373-1540

Companies in Oregon submitting the Hazardous Substance Information Survey and either reporting or not reporting hazardous substances.

Date of Government Version: 03/01/2004

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/01/2004

Date of Next Scheduled Update: 08/30/2004

SECTION 3: DATABASES SEARCHED AND UPDATE DATES

...Continued...

OR INDIAN UST:

OR INDIAN LUST:

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. (C) Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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POTENTIAL SUPERFUND LIABILITY

PRP: Potentially Responsible Parties

Source: EPA

Telephone: 202-564-6064

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/22/2004

Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/23/2004

Date of Next Scheduled Update: 07/05/2004

Appendix L

**Oregon Department Of Environmental Quality (DEQ) Environmental Cleanup Site
Information (ESCI) System Database Information**

URS

Oregon DEQ

[Home](#) > [Programs](#) > [Cleanup & Spills](#) > [ECSI Query](#) > [ECSI Site Details](#)



Environmental Cleanup Site Information (ECSI) Database Site Summary Report - Details for Site ID 272

This report shows data entered as of July 13, 2004 at 10:25:50 AM

This report contains site details, organized into the following sections: 1) [Site Photos](#) (appears only if the site has photos); 2) [General Site Information](#); 3) [Site Characteristics](#); 4) [Substance Contamination Information](#); 5) [Investigative, Remedial and Administrative Actions](#); and 6) [Site Environmental Controls](#) (i.e., institutional or engineering controls; appears only if DEQ has applied one or more such controls to the site). A key to certain acronyms and terms used in the report appears at the bottom of the page.

Go to [DEQ's Facility Profiler](#) to see a site map as well as information on what other DEQ programs may be active at this site.

General Site Information

Site ID: 272	Site Name: Port of Portland - Terminal 4	CERCLIS No: 987172509
Address:	11040 N Lombard ST Portland 97203	
	County: Multnomah	Region: Northwest
Other location information:	Former street address: 9504 N Bradford St.	
	Investigation Status: Listed on CRL or Inventory	NPL Site: No
		Orphan Site: No
Property:	Twtnshp/Range/Sect: 1N , 1W , 2	Study Area: No
	Latitude: 45.6033 deg.	Tax Lots: 110,42,102,93,119,124
	Longitude: -122.773 deg.	Site Size: 145.7 acres
Other Site Names:	<u>Hall-Buck Marine Inc.</u> Oregon Terminal Company (OTC) OTC Gearlock Maintenance Facility (Former) Quaker State Oil Co. UPRR - Product Transfer Pipeline (Former)	

Site Characteristics

General Site

Description:

Site History:

Contamination Information:

(1/31/91 MJZ/SAS) Pencil pitch (coal tar pitch) has repeatedly, over the years, been spilled into the water at Terminal 4's Slip 3, and has contaminated sediments. Pencil pitch is a suspected carcinogen that can harm humans through skin contact, inhalation, or ingestion. Pollution control experts say they know little about its effects on fish. Specific pencil pitch spills occurred 10/16/87, 3/28/86, and 6/18/97. (3/24/97 SMF/SAS) ~~35,000 cubic yards of pencil pitch contaminated sediments were removed from Slip 3 (Removal Action - EPA lead agency: December 1994 through January 1995) under federal consent Decree (May 1993).~~ Confirmation sediment sampling after the 1994/95 removal indicated that significant PAH and metals contamination remained. Subsurface investigations on the upland portion of Terminal 4 also indicate extensive LNAPL contamination

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(as diesel fuel, with oil also detected in places), which has been discharging through active seeps to Slip 3 since 1971. The most recent pencil pitch spill (6/18/97) is estimated at 500 - 1,000 pounds and required additional cleanup.

Manner and Time of Release: Coal tar pitch repeatedly spilled from shore-based crane and shoveled into river. Time of release: 3/28/86, 10/16/87, 6/18/97 (others possible). Apparent diesel fuel release from underground Union Pacific Railroad fuel-transfer pipeline. (Time of known releases Nov./Dec. 1970; others possible.) Various other apparent diesel fuel and oil releases (especially eastern portion of site) of unclear origin, but former UPRR fuel storage facility (ECSI #2017) is one likely source of petroleum actively seeping to river at Slip 3.

Hazardous Substances/Waste Types: Pencil pitch (coal tar pitch) - polynuclear aromatic hydrocarbons (Slip 3). #1 and #2 diesel fuel (soils, groundwater, possibly in Slip 3 sediments). Oil (subsurface soils, groundwater, possibly in Slip 3 sediments). Metals (antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc) (Slip 3 sediments). DDE and DDD (Slip 3 sediments). Possibly solvents (subsurface soils). Tributyl tin (Slip 3 sediments and along waterfront).

Pathways: Surface waters of Willamette River, sediments in river (aquatic organisms; consumers of fish). Potential trench-worker exposure to petroleum-contaminated subsurface soils and groundwater. The Port of Portland maintains a "Municipal" Water Right within the river at Terminal 4, although it has not been exercised for drinking-water purposes. The most significant threat appears to be to aquatic life in the river. There are residential properties within 100 meters of the NE corner of the project area.

Environmental/Health Threats: Surface water and food chain. Potential "trench-worker" exposure to petroleum contaminated subsurface soils and groundwater. A "Municipal Drinking Water Supply" water right within the river at Terminal 4, held by Port of Portland COULD be exercised, although the Port has no long-range plans to do so (water is currently used for irrigation and washdown, so there is the potential to expose on-site workers to contaminated surface water). Primary threat is believed to be to the river's aquatic life, and to consumers of fish caught from the river.

Status of Investigative or Remedial Action: (1/31/91 MJZ/SAS) During one spill incident the cleanup crew was able to recover only 1 gallon of material (pencil pitch) from surface water. The material readily sinks and it is assumed that it sunk to the bottom of the river. (3/24/97 SMF/SAS) 35,000 cubic yards of pencil pitch contaminated sediments were removed and transported to Ross Island Lagoon for burial during December 1994 - January 1995 (court-ordered removal action; lead agency: EPA). The Slip 3 cleanup criterium was 0.5 percent pencil pitch (maximum) remaining in Slip 3 sediments. An "interim" groundwater remediation system was activated along the eastern edge of Slip 3 during February 1993 to capture free product and contaminated groundwater before it discharged to the river. This groundwater remediation has not been capable of intercepting all free product and contaminated groundwater discharging to Slip 3. (11/4/98 TER/VCP) The Port drained and removed one of UPRR's abandoned pipelines in 1998. Workplans for completing remedial investigation of the upland area and sediments were submitted to DEQ in August 1998. Site work was completed in October 1998. An interim action to address ongoing petroleum seepage to Slip 3 has been proposed. (4/19/00 TER/VCP) Bioslurping interim action in place. Upland RI submitted. (9/26/00 TER/VCP) Upland risk assessment submitted, sediment RI submitted, upland FS in preparation. (5/7/03 TER/VCS) FS completed in July 2002. Staff

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Report prepared and submitted for comments by EPA, trustees, the Port, and the public. The Record of Decision was signed in April 2003. The proposed remedial action includes removal of NAPL and contaminated groundwater through extraction wells and removal of contaminated soil at the Slip 3 riverbank. The Port is conducting pilot testing for the remedial design.

Data Sources:

NWR DEQ WQ Source files; correspondence from owner and/or operator; complaint form; spill reports; Final Report for Slip 3 Sediment Dredging (April 1995); Terminal 4 Remedial Investigation Report, January 1994; other reports and contaminant data documented in 1998 Strategy Recommendation for site; Remedial Investigation Report, Terminal 4, Slip 3 Upland, January 21, 2000; Remedial Investigation Report, Terminal 4, Slip 3 Sediments, April 18, 2000.

Substance Contamination Information

Substance	Media	Concentration Level	Date Recorded
ACENAPHTHENE	Groundwater	MW-2	7/28/1993
ACENAPHTHENE	Sediment	Post-dredging sample	12/27/1994
ACENAPHTHYLENE	Groundwater	MW-1	7/28/1993
ACENAPHTHYLENE	Sediment	Post-dredging sample	12/27/1994
ANTHRACENE	Groundwater	MW-2	
ANTHRACENE	Sediment	Post-dredging sample	12/27/1994
ANTIMONY	Sediment	Post-dredging sample	12/27/1995
ARSENIC	Sediment	Post-dredging sample	12/27/1994
BENZO(a)ANTHRACENE	Groundwater	MW-2	
BENZO(a)ANTHRACENE	Sediment	Post-dredging sample	12/27/1994
BENZO(a)PYRENE	Groundwater	MW-1	
BENZO(a)PYRENE	Sediment	Post-dredging sample	12/27/1994
BENZO(b)FLUORANTHENE	Groundwater	MW-1	
BENZO(b)FLUORANTHENE	Sediment	Post-dredging sample	12/27/1994
BENZO(ghi)PERYLENE	Groundwater	MW-1	
BENZO(ghi)PERYLENE	Sediment	Post-dredging sample	12/27/1994
BENZO(k)FLUORANTHENE	Groundwater	MW-1	
BENZO(k)FLUORANTHENE	Sediment	Post-dredging sample	12/27/1994
CADMIUM	Sediment	Pre-dredging sample. Highest post-dredging concentration was 11 mg/kg.	
CHROMIUM	Sediment	Pre-dredging sample. Highest post-dredging concentration was 33 mg/kg.	
CHRYSENE	Groundwater	MW-2	
CHRYSENE	Sediment	Post-dredging sample.	1/5/1995
COPPER	Sediment	Post-dredging sample.	1/5/1995
DDD,p,p'	Sediment	Pre-dredging sample.	
DDE,p,p'	Sediment	59J ug/Kg Pre-dredging sample.	
DIBENZO(a,h)ANTHRACENE	Groundwater	MW-1	
DIBENZO(a,h)			

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ANTHRACENE	Sediment	Post-dredging sample.	12/27/1994
DIESEL - FUEL OIL	Groundwater	MW-2	
DIESEL - FUEL OIL	Soil	soil boring	7/20/1993
FLUORANTHENE	Groundwater	MW-1	
FLUORANTHENE	Sediment	Post-dredging sample.	12/27/1994
FLUORENE	Groundwater	MW-2	
FLUORENE	Sediment	Post-dredging sample.	12/27/1994
INDENO(1,2,3-cd)PYRENE	Groundwater	MW-1	
INDENO(1,2,3-cd)PYRENE	Sediment	Post-dredging sample.	12/27/1994
LEAD	Sediment	Pre-dredging sample. Highest post-dredging concentration was 790 mg/kg.	
MERCURY	Sediment	Pre-dredging sample. Highest post-dredging concentration was 0.25 mg/kg.	
NAPHTHALENE	Groundwater	MW-2	
NAPHTHALENE	Sediment	Post-dredging sample.	1/5/1995
NICKEL	Sediment	From single post-dredging sample. Next highest concentration encountered was 28 mg/kg.	1/5/1995
OIL - LUBRICATING	Soil	soil boring	6/17/1993
PHENANTHRENE	Groundwater	MW-2	
PHENANTHRENE	Sediment	Post-dredging sample.	1/5/1995
POLYAROMATIC HYDROCARBONS (PAH)	Sediment	Post-dredging sample.	12/29/1994
PYRENE	Groundwater	MW-2	
PYRENE	Sediment	Post-dredging sample.	12/27/1994
SILVER	Sediment	Post-dredging sample.	12/27/1994
TOTAL PETROLEUM HYDROCARBONS (TPH)	Groundwater	MW-2	
TOTAL PETROLEUM HYDROCARBONS (TPH)	Soil	Combined diesel fuel and oil in soil boring IB-27.	7/19/1993
XYLENES	Groundwater	MW-2	
XYLENES	Soil	Soil boring	1/20/1993
ZINC	Sediment	Pre-dredging sample. Highest post-dredging concentration was 960 mg/kg.	

Investigative, Remedial and Administrative Actions

Action	Start Date	Compl. Date	Resp. Staff	Lead Pgm
Site added to database	08/17/1988	08/17/1988	Marilyn Daniel	SAS
Responsible party notified re 11/88 Inventory listing	11/30/1988	11/30/1988		SAS
Site added to CERCLIS	05/03/1989	05/03/1989		
SITE EVALUATION	05/04/1989	05/04/1989	Leslie Kochan	SAS
State Basic Preliminary Assessment recommended (PA)	05/05/1989	05/05/1989	Leslie Kochan	SAS
BASIC PRELIMINARY ASSESSEMENT	02/22/1990	01/31/1991	Michael	SAS

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		Zollitsch	
Listing Review completed	07/27/1990 07/27/1990	Michael Zollitsch	SAS
Proposal for Confirmed Release List recommended	07/27/1990 07/27/1990	Michael Zollitsch	SAS
Proposal for Inventory recommended	07/27/1990 07/27/1990	Michael Zollitsch	SAS
No Further Remedial Action Planned under Federal program	09/28/1990 09/28/1990		
Facility proposed for Confirmed Release List	03/25/1991 03/25/1991	Michael Zollitsch	SAS
Facility proposed for Inventory	03/25/1991 03/25/1991	Michael Zollitsch	SAS
Petition or request granted	04/18/1991 04/18/1991	Michael Zollitsch	SAS
Extension requested by owner/operator	04/18/1991 04/18/1991		SAS
Owner/operator comments received on listing notification	05/14/1991 05/14/1991		SAS
Owner/operator comments received on listing notification	06/10/1991 06/10/1991		SAS
Review for final listing	06/25/1991 06/25/1991	Loretta Pickerell	SAS
Listing on Confirmed Release List recommended	06/25/1991 06/25/1991	Loretta Pickerell	SAS
Listing on Inventory recommended	06/25/1991 06/25/1991	Loretta Pickerell	SAS
EPA Removal Action	05/01/1993 04/01/1995		
Place on hold	09/05/1996 11/26/1996	Jennifer Sutter	VCS
Facility proposed for Inventory	11/26/1996 11/26/1996	Jennifer Sutter	VCS
Facility proposed for Confirmed Release List	11/26/1996 11/26/1996	Jennifer Sutter	VCS
Owner/operator comments received on listing notification	12/17/1996 12/17/1996	Stephen Fortuna	SAS
Owner/operator comments received on listing notification	01/09/1997 01/09/1997	Stephen Fortuna	SAS
Review for final listing	01/23/1997 04/01/1997	Stephen Fortuna	SAS
PRELIMINARY ASSESSMENT EQUIVALENT	02/11/1997 06/05/1998	Stephen Fortuna	SAS
Listing on Inventory recommended	04/01/1997 04/01/1997	Stephen Fortuna	SAS
Listing on Confirmed Release List recommended	04/01/1997 04/01/1997	Stephen Fortuna	SAS
Place on hold	04/02/1997 06/05/1998	Stephen Fortuna	SAS
Proposal for Confirmed Release List recommended	06/04/1998 06/04/1998	Stephen Fortuna	SAS
Proposal for Inventory recommended	06/05/1998 06/05/1998	Stephen Fortuna	SAS
REMEDIAL INVESTIGATION	08/01/1998 10/18/2000	Thomas Roick	VCS
		Kim Van	

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Facility proposed for Confirmed Release List	09/08/1998 09/08/1998	Patten	SAS
Facility proposed for Inventory	09/08/1998 09/08/1998	Kim Van Patten	SAS
Owner/operator comments received on listing notification	10/27/1998 10/27/1998	Kim Van Patten	SAS
Owner/operator comments received on listing notification	10/29/1998 10/29/1998	Kim Van Patten	SAS
Facility placed on Confirmed Release List	03/01/1999 03/01/1999	Kim Van Patten	SAS
Facility placed on Inventory	03/01/1999 03/01/1999	Kim Van Patten	SAS
RISK ASSESSMENT	03/12/1999 10/18/2000	Thomas Roick	VCS
REMOVAL	05/18/1999	Thomas Roick	VCS
FEASIBILITY STUDY	10/18/2000 05/07/2002	Thomas Roick	VCS
RECORD OF DECISION	05/07/2002 04/16/2003	Thomas Roick	VCS
REMEDIAL ACTION (Primary Action)	04/16/2003	<u>Thomas Roick</u>	VCS

Key to certain acronyms and terms in this report:

CERCLIS No.: The U.S. EPA's Hazardous Waste Site identification number, shown only if EPA has been involved at the site.

Region: DEQ divides the state into three regions, Eastern, Northwest, and Western; the regional office shown is responsible for site investigation/cleanup.

NPL Site: Is this site on EPA's National Priority List (i.e., a federal Superfund site)? (Y/N).

Orphan Site: Has DEQ's Orphan Program been active at this site? (Y/N). The Orphan Program uses state funds to clean up high-priority sites where owners and operators responsible for the contamination are absent, or are unable or unwilling to use their own resources for cleanup.

Study Area: Is this site a Study Area? (Y/N). Study Areas are groupings of individual ECSI sites that may be contributing to a larger, area-wide problem. ECSI assigns unique Site ID numbers to both individual sites and to Study Areas.

Pathways: A description of human or environmental resources that site contamination could affect.

Lead Pgm: This column refers to the Cleanup Program affiliation of the DEQ employee responsible for the action shown. SAS or SAP = Site Assessment; VCS or VCP = Voluntary Cleanup; ICP = Independent Cleanup; SRS or SRP = Site Response (enforcement cleanup); ORP = Orphan Program.

You may be able to obtain more information about this site by contacting Thomas Roick via email or contact the Northwest regional office. If this does not work, you may contact Gil Wistar at (503) 229-5512, or via email at wistar.gil@deq.state.or.us.

DEQ Online is the official web site for the Oregon Department of Environmental Quality.

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Appendix M
Oregon State And Portland Fire Marshall Information

URS

RETAIN A COPY OF THIS SURVEY FOR 3 YEARS

Due Date: November 30, 2003

Facility ID Number:
024440

2003

OREGON STATE FIRE MARSHAL
HAZARDOUS SUBSTANCE INFORMATION SURVEY

Cross off the old or incorrect information and type or print changes or additions in the [bracketed] areas.

SECTION A HAZARDOUS SUBSTANCE PRESENCE Check the correct box to the left.

- ☒ YES ☐ NO 1. Were there hazardous substances present at this site in reportable quantities during this survey period?
☒ YES ☐ NO 2. Were Extremely Hazardous Substances (EHS) present at this site at or above the threshold planning quantities during this survey period?
☐ YES ☒ NO 3. Is this facility subject to the reporting requirements of Section 112(r) of the Clean Air Act?
☐ YES ☒ NO 4. Is this facility subject to the Process Safety Management (PSM) requirements of OR-OSHA?

SECTION B DEMOGRAPHIC DATA Complete, correct or add information in the [bracketed] areas.

1. NAICS CODE 1: 488310 DEFINITION: Dock & Pier Operations
2. NAICS CODE 2: DEFINITION:
3. BUSINESS ACTIVITY AT THIS SITE: TRANSFER OF BULK CARGO BETWEEN RAILCARS, STRG BLDG & SEAGOI
4. DUN & BRADSTREET #: 07-507-9822
5. MANAGER'S NAME: BRAD A CLINEFELTER
6. SEND TO ATTENTION OF: BRAD A CLINEFELTER
7. E-MAIL ADDRESS: NONE
8. BUSINESS NAME: KINDER MORGAN BULK TERMINALS
9. DEPT OR DIV: PTLD B T #4 CLINEFELTER
10. SITE ADDRESS: 11040 N LOMBARD T-4 P-4
11. MAILING ADDRESS: PO BOX 83838
CITY: PORTLAND
CITY: PORTLAND
COUNTY: MULTNOMAH
COUNTY: MULTNOMAH
STATE: OR ZIP CODE: 97203
STATE: OR ZIP CODE: 97283-0838
12. BUSINESS PHONE: 503-285-2990
13. NUMBER OF EMPLOYEES AT THIS SITE: 25
14. EMERGENCY ASSISTANCE CONTACT PERSON FOR THIS SITE:
BRAD A CLINEFELTER
15. EMERGENCY CONTACT PHONES:
DAY: 503-285-2990 NIGHT: 503-224-2343
16. RESPONSIBLE FIRE DEPARTMENT: PORTLAND FIRE BUREAU

SPECIAL FIRE DEPARTMENT INFORMATION This section is for information the fire service needs to know in case of an emergency.

17. ☒ YES ☐ NO WRITTEN EMERGENCY PLAN. IF YES, WHERE AT SITE: 11040 N. Lombard T-4, P-4, Terminal office
18. ☒ YES ☐ NO AUTOMATIC FIRE SUPPRESSION SYSTEM PRESENT; e.g., sprinklered, halon system, etc.
19. ☒ YES ☐ NO ARE STORAGE BUILDINGS/TANKS/AREAS PLACARDED ACCORDING TO NFPA 704?
20. ☒ YES ☐ NO ARE OTHER TYPES OF PLACARDS USED?

BRAD A CLINEFELTER
KINDER MORGAN BULK TERMINALS
PTLD B T #4 CLINEFELTER
PO BOX 83838
PORTLAND, OR 97283-0838

SECTION C PERSON COMPLETING FORM

Signature required: I certify that the information provided is true and accurate to the best of my knowledge. This person will be contacted to answer any questions needing clarification.

1. PRINT NAME: Brad A. Clinefelter
2. SIGNATURE: Brad A. Clinefelter
3. Date: 10-29-03 Phone: (503) 285-2990 Ext: 11

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For office use only: R F DE 1 C

7337

Chemical
Form

2003

Facility ID Number
024440OREGON STATE FIRE MARSHAL
Hazardous Substance Information Survey

SECTION D

Cross off the old or incorrect information and type or print changes or additions in the [bracketed] area.

Common Name or Trade Name: ACETYLENE

Hazardous Ingredient: ACETYLENE

☐ No Longer Reportable☒ 112R☐ EHS☐ PSM☒ 1-Pure☐ 2-Mixture

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UN/NA if known	EPA Pesticide Registration No:
3	3	10	11	10	10	365	1 2 4	2.1	1001	CAS No. if known 74-86-2

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	I	WHSE 432	1	S CENTER WALL	MAINT SHOP	C	11
<input type="checkbox"/>							
<input type="checkbox"/>							

Common Name or Trade Name: ARGON 75%/CARBON DIOXIDE 25%

Hazardous Ingredient: ARGON

☐ No Longer Reportable☐ 112R☐ EHS☐ PSM☒ 1-Pure☐ 2-Mixture

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UN/NA if known	EPA Pesticide Registration No:
3	3	04	10	04	04	365	1 2 4	2.2	1956	CAS No. if known 7440-37-1

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	I	WHSE 432	1	E CENTER WALL	MAINT SHOP	C	10
<input type="checkbox"/>							
<input type="checkbox"/>							

Common Name or Trade Name: DIESEL #2

Hazardous Ingredient: DIESEL FUEL #2

☐ No Longer Reportable☐ 112R☐ EHS☐ PSM☒ 1-Pure☐ 2-Mixture

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UN/NA if known	EPA Pesticide Registration No:
2	2	20	21	30	30	365	B 1 4	3.3	1993	CAS No. if known 68476-34-6

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	O	RAILCAR BLD 436		LOCOMOTIVE FUEL	NA	NW	21
<input type="checkbox"/>							
<input type="checkbox"/>							

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Facility ID Number
024440OREGON STATE FIRE MARSHAL
Hazardous Substance Information Survey

SECTION D

Cross off the old or incorrect information and type or print changes or additions in the [bracketed] area.

Common Name or Trade Name: GASOLINE

[20-499 gallons]

Hazardous Ingredient: PETROLEUM DISTILLATES

KAT

☐ No Longer Reportable☐ 112R☐ EHS☐ PSM☒ 1-Pure []☐ 2-Mixture []

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UNNA if known	EPA Pesticide Registration No:
2	2	10	11	20	20	365	A 1 4	3.1		
								6.3	1203	CAS No. if known 8006-61-9

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	O	WHSE 432		VEHICLE FUELING	NA	C	11
<input type="checkbox"/>							
<input type="checkbox"/>							

Common Name or Trade Name: LUBRICATING OIL

[Drum]

Hazardous Ingredient: REFINED MINERAL OIL

[Tank inside bldg]

☐ No Longer Reportable☐ 112R☐ EHS☐ PSM☒ 1-Pure []☐ 2-Mixture []

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UNNA if known	EPA Pesticide Registration No:
2	2	10	11	10	10	365	D 1 4	4.5		
							C 1 4		1270	CAS No. if known 64742-65-0

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	I	WHSE 432	1	SE CORNER	MAINT SHOP	SE	11
<input type="checkbox"/>							
<input type="checkbox"/>							

Common Name or Trade Name: OXYGEN

Hazardous Ingredient: OXYGEN

☐ No Longer Reportable☐ 112R☐ EHS☐ PSM☒ 1-Pure []☐ 2-Mixture []

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UNNA if known	EPA Pesticide Registration No:
3	3	20	20	20	20	365	L 2 4	2.2		
								5.1	1072	CAS No. if known 7782-44-7

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	I	WHSE 432	1	NW CORNER	MAINT SHOP	NW	20
<input type="checkbox"/>							
<input type="checkbox"/>							

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Form

Facility ID Number

024440

2003
OREGON STATE FIRE MARSHAL
Hazardous Substance Information Survey

SECTION D

Cross off the old or incorrect information and type or print changes or additions in the [bracketed] area.

Common Name or Trade Name: PROPANE

Hazardous Ingredient: PROPANE

☐ No Longer Reportable☒ 112R☐ EHS☐ PSM☒ 1-Pure☐ 2-Mixture

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UN/NA if known	EPA Pesticide Registration No:
3	2	03	03	10	10	365	1 2 4	2.1 6.3	1075	CAS No. if known 74-98-6

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	O	WHSE 432		VEHICLE FUELING	NA	C [E.C.]	03
<input type="checkbox"/>							
<input type="checkbox"/>							

Common Name or Trade Name: SODA ASH

Hazardous Ingredient: SODIUM CARBONATE

☐ No Longer Reportable☐ 112R☐ EHS☐ PSM☒ 1-Pure☐ 2-Mixture

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UN/NA if known	EPA Pesticide Registration No:
1	1	52	70	70	70	365	H 1 4	6.3 8.0		CAS No. if known 497-19-8

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	I	STRG 440	1	ENTIRE CARGO FL	CARGO WHSE	V	70
<input type="checkbox"/>							
<input type="checkbox"/>							

Common Name or Trade Name: SULFURIC ACID

Hazardous Ingredient: SULFURIC ACID

☐ No Longer Reportable☐ 112R☒ EHS☐ PSM☒ 1-Pure☐ 2-Mixture

Physical State Use Table I	Units of Measure Use Table II	Avg Amt Code Use Table III	Max Amt Code Use Table III	Amt IN Code Use Table III	Amt OUT Code Use Table III	No Days On Site 3 digits	Storage Code Use Table IV & V	Hazard Class Table VI	UN/NA if known	EPA Pesticide Registration No:
2	2	10	10	11	11	365	A 1 4 C 1 4	8.0 4.4	1830	CAS No. if known 7664-93-9

LOCATION

Delete	In/Out	Building	Floor	Area	Room	Quadrant	Loc Max Use Table III
<input type="checkbox"/>	O	WHSE 432		WASTE WATER TRT	NA	C [S.E.]	10
<input type="checkbox"/>							
<input type="checkbox"/>							

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TO Matt Mudge — --> NO comments
on the back of
these cards

PERMIT NO. <u>92153-6</u> DATE <u>10-13</u> 19 <u>92</u>		HEATING OIL (OTHER THAN MOTOR FUEL) COMPRESSED GASES City of Portland, Oregon FIRE PREVENTION DIVISION 55 S.W. ASH—PORTLAND, OREGON 97204		19-0 PERMIT CODE <u>Supplement A-1</u>	
ADDRESS <u>11040 N. Lombard</u>		OCCUPANCY <u>285-2992</u>		PHONE <u>285-2992</u>	
INSTALLED FOR <u>PACIFIC NORTH-WEST OIL</u>		KIND OF INSTALLATION: OIL TANK EQUIPMENT <u>LP GAS</u> COMPRESSED GAS			
APPLICANT <u>Mar-Com Inc</u>					
TANK MATERIAL <u>Steel</u> CAPACITIES <u>4,000 gal</u> UNDERGROUND <u>ABOVE GROUND</u> STREET <u>INTEGRAL</u> YARD <u>DETACHED</u> UNDER <u>INSIDE</u> BUILDING <u>BUILDING</u>		OIL - GAS EQUIPMENT TYPE INSTALLATION PRODUCT USED FOR TYPE OF PUMP INSPECTED BY DATE			
PIPING FILL <u>VENT</u> <u>SUCTION</u> <u>RETURN</u> VALVES TANK <u>SOLENOID</u> <u>THERMAL</u> INSPECTED BY <u>NOBEN (MIKE REIL)</u> DATE <u>4-26-93</u>		FIRE INSPECTOR'S REPORT L.P. GAS VAPOR <u>LIQUID TRANSFER</u> GRAVITY <u>PUMP</u> INSPECTED BY DATE			
Installation to be in conformance with Ordinance No. 190672 and under supervision of the FIRE MARSHAL. NOTE: Before any portion of street area is used, owner of property must apply to City Engineer for permit to use street. Notify Fire Marshal for inspection before tank or pipes are covered. Make checks payable to the City Treasurer.					
TELEPHONE 823-3700					

PERMIT NO. <u>92153-6</u> DATE <u>10-13</u> 19 <u>92</u>		CITY OF PORTLAND, OREGON FIRE PREVENTION DIVISION 55 S.W. ASH—PORTLAND, OREGON 97204 GASOLINE AND MOTOR FUEL TANK AND PUMP APPLICATION		19-0 PERMIT CODE	
ADDRESS <u>11040 N. Lombard</u>		OCCUPANCY <u>285-2992</u>		PHONE <u>285-2992</u>	
INSTALLED FOR <u>PACIFIC NORTH-WEST OIL</u>					
APPLICANT <u>Mar-Com Inc</u>					
TANK MATERIAL <u>Steel</u> CAPACITIES <u>4,000 gal</u> UNDERGROUND <u>ABOVE GROUND</u> STREET <u>INTEGRAL</u> YARD <u>DETACHED</u> UNDER <u>INSIDE</u> BUILDING <u>BUILDING</u>		PUMP TYPE SUB IN-DEPENDENT INSIDE INSIDE		LOCATION BUILDING <u>ADDITION</u> REPLACEMENT TOTAL NO. OF PUMP ON PREMISES	
TANK PIPING FILL <u>VENT</u> <u>SUCTION</u> <u>RETURN</u> VALVES TANK <u>SOLENOID</u> <u>THERMAL</u> INSPECTED BY <u>NOBEN (MIKE REIL)</u> DATE <u>4-26-93</u>		FIRE INSPECTOR'S REPORT L.P. GAS VAPOR <u>LIQUID TRANSFER</u> GRAVITY <u>PUMP</u> INSPECTED BY DATE			
Installation to be in conformance with Ordinance No. 190672 and under supervision of the FIRE MARSHAL. NOTE: Before any portion of street area is used, owner of property must apply to City Engineer for permit to use street. Notify Fire Marshal for inspection before tank or pipes are covered. Make checks payable to the City Treasurer.					
TELEPHONE 823-3700					

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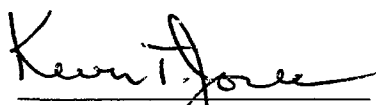


West Coast Region

STORMWATER POLLUTION CONTROL PLAN

Prepared in Accordance with
NPDES Permit No.102446 issued by the
Department of Environmental Quality

KINDER MORGAN BULK TERMINALS, INC.
BULK TERMINAL #4
11040 NORTH LOMBARD
PORTLAND, OR. 97203
(503) 285-2990


Regional Vice President

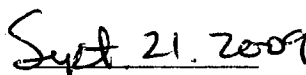

Date

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APPENDIX A LOCOMOTIVE MAINTENANCE WORK AREAS

APPENDIX B LOCOMOTIVE BI-WEEKLY INSPECTION CHECKLIST

1.0 STORM WATER POLLUTION CONTROL PLAN PREPARATION & IMPLEMENTATION

The Storm Water Pollution Control Plan for Kinder Morgan Bulk Terminals, Terminal 4 (KMBT-4) facility is intended to meet the requirements for such a plan as specified in the individual NPDES Permit #102446 issued by the Oregon Department of Environmental Quality (DEQ).

The plan has been prepared jointly by the Terminal Manager and the Regional EHS Manager both of whom are knowledgeable in storm water management and familiar with the facility. The Plan has been signed in accordance with 40 CFR 12.22, by the Regional Vice President. This plan shall be kept current and updated as necessary to reflect any changes in facility operations.

The Plan shall be submitted to DEQ in accord with Schedule C of the Permit and a copy shall be maintained at the facility and made available upon request to DEQ or other government agencies responsible for storm water management pursuant to Oregon State regulations.

2.0 SITE DESCRIPTION

2.1 INDUSTRIAL ACTIVITIES

Bulk quantities of outbound dry material are transferred from railcars directly into cargo ships or alternately into the storage building, where it is later reclaimed and transferred into cargo ships. Railcars containing bulk quantities of outbound material enter the facility on rail tracks 4-10 and 4-12 as identified on the Site Drainage Map (see Figure 2). Railcars enter the structure identified as the unloading building and discharge their contents into a pit located beneath the tracks. An enclosed conveyor system transports the material from the pit directly to the top of an unloading tower located adjacent to the edge of Berth 411 or to the storage building, where it is later reclaimed and directed to the unloading tower. The tower regulates the transfer of material from the conveyor to the cargo holds of ships docked at Berths 410 and 411.

The facility operates with an Air Contaminant Discharge Permit # 26-2909, issued by DEQ.

Product spills that may occur onto the leased parcels during the transportation of materials are shoveled, swept and/or vacuumed daily.

KMBT-4 operates a system to treat wash water prior to its disposal to the sanitary sewer. The system treats water used to steam clean machinery, water to wash the pit area beneath the railcar unloading building as well as a small portion of storm water from portions of the dock.

Wash water is collected in tanks and settling basin as identified on the Site Drainage Map. The tanks and basin allow solids to settle out prior to treatment. Effluent from the settling basin is pumped to an additional tank located inside the warehouse.

From the inside storage tank, wash water receives a metered injection of Sulfuric acid for pH adjustment and then passes through an oil/water separator before discharging into the City Sewer system.

Water used to pressure wash materials handling equipment also drains to the water treatment system described above.

A list of bulk materials handled by KMBT-4 is presented in Section 2.5 of this SWPCP.

2.2 GENERAL LOCATION MAP

The street address of the subject property is 11040 North Lombard, Terminal 4, Pier 4, Portland, Oregon 97203. A general location map is included as Figure 1.

2.3 SITE MAP AND SITE DRAINAGE MAP

A Site Drainage Map, Figure 2, illustrates the location of site facilities and illustrates directional storm water runoff patterns of the surface areas. The Kinder Morgan facility is located within the Drainage Basin identified as "Basin L" which drains to Outfall "B" in Wheeler Bay.

2.4 IMPERVIOUS AREAS

Impervious surfaces include all paved surfaces and roofed areas. Impervious surface areas account for about 6.6 acres of the subject 15.3 acre drainage basin "L" surface area.

2.5 POTENTIAL POLLUTANTS

KMBT-4 ships and receives bulk quantities of materials. The primary material handled by KMBT-4 is soda ash. By permit, other products such as Bentonite clay, soybean meal, potash fertilizer, sodium sulfite, and talc may be handled.

In addition, the facility maintains various quantities of petroleum-based lubricants, gasoline, diesel fuel and sulfuric acid. The introduction of these materials into storm water runoff has the potential to affect pH, oil and grease, suspended solids, and total dissolved solid levels. Benchmark values of Storm Water effluent pollutants are noted in the Individual NPDES Permit.

2.6 RECEIVING WATERS

Storm water from KMBT-4 is discharged through a series of catch basins directly into the Willamette River. Due to the design of the terminal some storm water is also discharged to the city sewer system.

2.7 DESCRIPTION OF STORM WATER DISCHARGES

Two storm water discharge outfalls are located in the vicinity of the subject property (see Figure 1).

Storm Water Outfall A is located near the southeast corner of the subject property. This outfall receives storm water runoff collected by two catch basins located east of the subject property. These catch basins are located outside both the preferential dock use area and leased areas and are unlikely to receive storm water impacted by

industrial activities performed by KMBT-4. No storm water sampling shall be performed at this outfall or at any of the associated catch basins.

Storm Water Outfall B is located approximately 550 feet west of the railcar unloading building and discharges into Slip Number 2 (Wheeler Bay). Storm water is collected from more than 25 catch basins and then enters a drainage network which underlies the subject property; the rail yard to the east and adjacent properties to the north. Within the boundaries of the subject property there are 20 catch basins that connect to this drainage network (see figure 2). Storm water sumps located adjacent to machinery are equipped with shut-off valves to minimize the possibility of oil or other contaminants from entering the River during an Emergency or from spills.

Storm water samples are taken monthly each year during an 8 month period, (October through May) at Storm Water Outfall B. This outfall represents run-off from KMBT-4 lease area activities as well as some areas of road and rail trackage on the Port's property. Storm water contributions to this Outfall may also come from neighboring tenant lease areas. In the event that any sampling parameter exceeds DEQ limits, KMBT-4 will work with the Port of Portland or other Agencies to address the problem.

3.0 CONTROLS

3.1 STORM WATER BEST MANAGEMENT PRACTICES

Current best management practices designed to minimize industrial impact on storm water discharge include:

3.1.1 CONTAINMENT

KMBT-4 operates one (1) 5,000 gallon underground storage tank containing diesel oil used to supply fuel to locomotives and other equipment. The tank is constructed of double-wall steel and is equipped with a leak-detection alarm system and is cathodically protected.

The water treatment system includes 330 gallons of sulfuric acid that is metered into a mixing tank. The acid container is located inside secondary containment designed to contain the entire volume of sulfuric acid in the event of a leak or rupture. Petroleum based lubricants are stored inside the warehouse. Lubricants are stored on spill containment trays and troughs. The warehouse floor is sloped toward a central clean-out basin that is not connected to any storm or sanitary drain line. The clean out basin is maintained so any accumulated liquids are readily cleaned up. The facility also has a 500-gallon above-ground gasoline tank located outside the east wall of the warehouse. The tank has an integral containment system and is located behind concrete barriers and cyclone fencing to provide protection from vehicles.

Material arriving by railcar is unloaded into the pit area located underneath the unloading building. The unloading building is open at either end to permit railcars to pass through the structure. An enclosed conveyor system prevents spillage of outbound material transported to the storage building and to the

unloading tower. All wash water used in cleaning this equipment is captured in a sump underneath the unloading building and pumped to the wash water treatment system. All scrap and waste cargo containers (drop boxes) are either covered or staged in areas which drain to the wash water settlement basin.

3.1.2 OIL AND GREASE

An oil/water separator is part of the facility's water treatment system. Water used for steam-cleaning equipment and machinery is pH adjusted and then passes through the oil/water separator prior to discharge to the City sewer system.

Any fuel, oil or grease which is spilled onto surfaces exposed to storm water run off must be cleaned up as soon as possible. Spill kits containing absorbents, diking material and containers shall be kept near fueling areas. Storm water drains adjacent to fueling areas are equipped with shut-off valves that are typically maintained in the "closed" position and have rubber mats immediately available to cover storm water catch basins in the event of a fuel spill. Oil absorbents and diking materials shall be present when changing or adding lubricants to any machinery on site.

3.1.3 WASTE CHEMICALS AND MATERIAL DISPOSAL

All dumpsters containing soda ash waste shall be covered or located in an area which drains to the wash water settlement basin. All containers of scrap steel and other solid wastes shall be stored in areas which do not have potential to enter the storm water discharge system. Used oils and used antifreeze are recycled. All wastes leaving the site are disposed of at properly permitted disposal sites.

3.1.4 EROSION AND SEDIMENT CONTROL

All surfaces of the KMBT-4 site are constructed of impervious material. Storm water will drain to either the storm water collection system, which flows to outfall B, or to the water treatment system which discharges to the Portland City Sewer system.

3.1.5 DEBRIS CONTROL

Debris and spilled cargo are cleaned up as necessary on a daily basis. Storm water catch basins and the settlement basin are important to minimize debris from entering storm water collection and discharge systems. These areas are inspected monthly for debris and foreign matter and are routinely cleaned.

3.1.6 STORM WATER DIVERSION

Concrete berms and the bullrail on the 411 wharf divert and control the flow of storm water runoff in this area. Storm water confined by the berms is, to the extent possible and given the age and repair of the dock, directed into the wash water settling basin. The dock surface in the vicinity of the shiploader is surfaced with a waterproof epoxy coating intended to minimize rainfall

absorption through the dock and into the Willamette River. Additionally, a water pumping system is in place to automatically move water from the settling basin to the storage tanks so as to prevent the settling pond from overflowing. Rainfall contacting all other areas flows to one of the catch basins identified on the Site Drainage Map. Fueling facilities, storage areas, cargo unloading area, water treatment system and waste disposal areas are either covered or located in areas that drain storm water to the water treatment system which, is then, discharged to the Portland City Sewer system.

3.1.7 COVERING ACTIVITIES

Dry bulk materials received at KMBT-4 and destined for outbound shipment are stored and transported within enclosures. Outbound materials are first unloaded from railcars in the unloading building. An enclosed conveyor then transports these materials either to the marine tower for final loading into cargo ships or to the enclosed 30,000 MT storage building where it is later reclaimed and transported by enclosed conveyor to the marine tower for final loading into cargo ships.

KMBT-4 stores new oil, new and used antifreeze and other petroleum lubricants inside the warehouse. The sulfuric acid container and its secondary containment are located outside, adjacent to the warehouse, and are covered.

Trash dumpsters are kept covered or are staged in areas where storm water is diverted to the water treatment system. Diesel and Gasoline Fuel Stations are covered.

3.1.8 HOUSEKEEPING

Cargo spills from railcars will be shoveled, swept or vacuumed at first opportunity as safety allows. Any spilled cargo which results from malfunctioning equipment will be shoveled, swept, or vacuumed at first opportunity as safety allows. Leaks from equipment shall be promptly cleaned up and sources of leaks repaired. Any spills resulting from fueling shall be cleaned immediately. Vehicles shall be maintained to prevent pollutants from entering storm water.

3.1.9 BEST MANAGEMENT PRACTICES (BMPs)

Washing Waste Water impacts include:

Preventive maintenance on wastewater system and related equipment
Good housekeeping and spill response to clean up any debris or substance, such as oil or grease, before it may enter the sewer or wastewater collection system.

Diversion and containment of equipment wash water from storm drain pipes to minimize impact to storm water discharge.

Follow the requirements of the Kinder Morgan Bulk Terminal #4 Accidental Spill Control Plan.

Employ dry cleaning methods where appropriate to reduce waste water treatment needs.

Locomotive Maintenance:

Two levels of locomotive maintenance activities will occur at Kinder Morgan Portland Bulk Terminal 4. Semi-weekly maintenance will occur at the West tail track just before the road crossing entrance to the T-4 facility on either the north or south track routinely used to bring railcars into the dump building. (See Appendix A, Site A) At these sites only inspection and less demanding maintenance or R&R (remove and replace) activities of the sort described in Appendix B will be conducted. Best Management Practices for these activities include the use of secondary containment vessels to hold any buckets, etc. being used for draining liquids and additional impermeable membranes, ground covers and absorbents being used when appropriate to provide additional work vicinity ground protection.

Two secondary locomotive maintenance work areas are also now defined for use at Terminal 4. (See Appendix A, Site B & C) The first is just north of the entrance to the Kinder Morgan Terminal 4 maintenance shop on the south track exiting the railcar dump building. The second is further along on this same rail track just east of the asphalt so as to provide the ability to work underneath the locomotive should that be necessary. Work likely to be performed at either of these sites could be more extensive in nature. However, the routine precautions to be taken in these two areas are more extensive. Here the impermeable barrier will also be bermed to contain any liquid materials generated. Upon completion any liquids will be gathered and disposed of properly according to Kinder Morgan and appropriate industrial waste handling protocols.

In the event repairs are called for that include welding, cutting or grinding, such repairs will be done over Site B when possible. Should the locomotive be unable to move until these activities are completed, appropriate groundcovers and or hot work blankets will be used to prevent metallic residue from entering the ballast rock.

3.2 SPILL PREVENTION AND RESPONSE PROCEDURES

Inadvertent spills and releases of solid cargo products will be cleaned up by means of shoveling, sweeping and/or vacuuming. Leaks or drips of oil on docks will be cleaned up using absorbents, and then containerized as quickly as practicable. An ample supply of absorbents and cleaning equipment shall be stored in the maintenance shop at all times. Inadvertent spills and releases of cargo products directly into the river from handling equipment, such as front-end loaders, clamshell buckets, ship loaders, conveyors, etc., shall be minimized to the extent practicable by (a) maintaining all equipment as necessary and (b) frequent cleanup of accumulations of spilled cargo on or near the dock. Spill kits are available onsite and qualified spill cleanup. Agencies such as NRC, National Response Corporation are available to respond to accidental spills. Under no circumstances may any material or waste of any kind be discharged into the river except as allowed under KMBT-4's NPDES Permit. Spill response and prevention plans are discussed in KMBT-4's Accidental Spill Prevention Plan (ASPP).

3.3 PREVENTIVE MAINTENANCE

The Terminal Manager shall be responsible for administering preventive maintenance programs. These programs provide for monthly inspections of potential spill areas, all containment areas, and all loading and unloading areas. During cargo transfer operations material handling equipment shall be inspected a minimum of two times per day for any leakage or spills. Clean up of leaks and/or spills are to be accomplished at first opportunity as safety allows.

3.4 EMPLOYEE EDUCATION

KMBT-4 provides training and instruction for all personnel regarding the goals and content of the SWPCP. Training addresses storm water management, spill response procedures and Best Management Practices.

KMBT-4 may choose to present this information as part of regularly scheduled health and safety meetings, posted materials, or a combination thereof. The effectiveness of this program shall be evaluated and modified as necessary as part of the Annual Review.

4.0 RECORDKEEPING AND INTERNAL REPORTING PROCEDURES

The SWPCP will be maintained on file at KMBT-4 and made available to the DEQ for inspection upon request. A copy of the Storm Water Discharge Permit shall be kept on file with the Plan.

KMBT-4 shall maintain records of the following events:

- Inspection, maintenance, repair, and educational activities.
- Incidents that impact or have the potential to impact storm water or surface waters.

Figure 1
 Radar Marine Portland Bulk Terminal & Shorewater Distribution System

